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AUDIOVISUAL AIDS, *AUDIOVISUAL INSTRUCTION, *AUDIOVISUAL PROGRAMS, LEGISLATION, *STATE LEGISLATURE, MEDIA RESEARCH, *INTERSTATE PROGRAMS, *PROGRAM EVALUATION, OPINION, QUESTIONNAIRES, NATIONAL PROGRAMS, STATES AUDIOVISUAL EDUCATION STUDY (SAVES). SAVES PROJECT, SACRAMENTO, CALIFORNIA

THE FINDINGS OF THE FOLLOWING TWO EXTENSIVE AND DETAILED STUDIES ARE BROUGHT TOGETHER IN BRIEF FORM--(1) THE "STATES AUDIOVISUAL EDUCATION STUDY: "SAVES). " CONCERNED WITH PRACTICES OF STATE DEPARTMENTS OF EDUCATION IN THE FIELD OF AUDIOVISUAL AND NEW EDUCATIONAL MEDIA, AND (2) A STUDY OF STATE LAWS AFFECTING AUDIOVISUAL EDUCATION. THIS SUMMARY REPORT-(1) DESCRIBES THE RESEARCH DESIGN AND PROCEDURES EMPLOYED IN THE ORIGINAL "SAVES" STUDY, REPRESENTING THE TIME PERIOD FROM 1960 TO 1961, (2) EXAMINES AND DISCUSSES CERTAIN 1960-61 NATIONAL PATTERNS OF NEW EDUCATIONAL MEDIA ACTIVITIES IN THE 50 STATE DEPARTMENTS OF EDUCATION, WITH SPECIAL ATTENTION TO ORGANIZATION AND FINANCE, LEADERSHIP ACTIVITIES, OPERATIONAL SERVICES AND ACTIVITIES RESEARCH AND DEVELOPMENT ACTIVITIES. AND REGULATORY ACTIVITIES. (3) REPORTS 1960-61 OPINIONS AND OBSERVATIONS OF PERSONNEL IN THE 50 STATE EDUCATIONAL DEPARTMENTS CONCERNING GROWTH, NEEDS, PROBLEMS, AND ANTICIPATED FUTURE DEVELOPMENTS IN THE EDUCATIONAL MEDIA FIELD, (4) COMPARES 1960-61 AND 1964-65 PLANS OF ORGANIZATION AND ACTIVITIES FOR NEW EDUCATIONAL MEDIA IN 5 SELECTED STATES, (5) COMPARES SELECTED ASPECTS OF THE 1960-61 AND 1964-65 NEW MEDIA PROGRAMS IN THE 50 STATES, BASED ON QUESTIONNAIRE RESPONSES, AND (6) SUMMARIZES AND COMMENTS ON LEGISLATION AFFECTING AND PERTAINING TO NEW EDUCATIONAL MEDIA ACTIVITIES IN THE 50 STATES. (JH)

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STATES AUDIOUSSUAL EDUCATION STUDY

A SUMMARY REPORT

U. S. DEPARTMENT. OF HEALTH, EDUCATION AND WELFARE

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SACRAMENTO STATE COLLEGE FOUNDATION SACRAMENTO, CALIFORNIA 1988

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This <u>Summary Report</u> was performed pursuant to a contract (No. OE-5-16-008) with the United States Department of Health, Education, and Welfare, Office of Education, under provisions of Title VII B of the National Defense Education Act.

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Sacramento State College Foundation



PREFACE

This Summary Report brings together in brief form the findings of two rather extensive and detailed studies: one concerned with practices of state departments of education in the field of audiovisual and new educational media, known as the States Audiovisual Education Study; and the other, with state laws affecting audiovisual education. The States Audiovisual Education Study, the summary of which occupies by far the larger portion of this report, was originally published in 1963 in two volumes under the title, Practices of State Departments of Education in New Educational Media/Audiovisual Education During 1960-61, and the investigation of state legislation affecting audiovisual education, published in 1962 in three volumes, was entitled State Laws on Audiovisual Media of Instruction in Public Schools and on Establishment of Educational Television Stations (John W. Connelly, Jr.). Certain aspects of the first-mentioned study were updated for 1964-65 at the request of the Association of Chief State School Audiovisual Officers and the data thus obtained are presented in relationship to earlier findings of the 1960-61 study. However, scope of the present project permitted only limited updating of audiovisual education activities (for 1964-65) in the 50 states and the sampling of current practices in but a few states. These updated materials appear in Chapter 4 of this report.

The original States Audiovisual Education Study involved a large staff and required more than two years for its completion. In contrast, only four part-time professional persons have served on the staff of the Summary Report project scheduled for completion within a year--as provided in contract No. OE-5-16-008 between the U. S. Office of Education and the Sacramento State College Foundation and funded under Title VII B, NDEA.

As would be expected, it has been necessary to take certain liberties in selecting items, extracting data, and reorganizing the materials from these two studies (which total more than 2,800 pages) for this Summary Report. However, every effort has been made to preserve the integrity of the original studies.

While it is not possible to list the names of several hundred persons who contributed in various ways to the original States Audiovisual Education Study, appreciation is expressed to them for their help. Their cooperation made possible the earlier research study upon which this report is primarily based. Likewise, many persons and groups have assisted in the preparation of this Summary Report. For their assistance, support and encouragement we extend grateful appreciation to the following groups and individuals:

* Council of Chief State School Officers who supported the request for making a study of the new educational media/audiovisual education activities in state departments of education.



- * Association of Chief State School Audio-Visual Officers who assisted in updating certain portions of the original study and who also requested that the <u>Summary Report</u> be prepared.
- * The Department of Audiovisual Instruction (NEA) for supporting a request for a <u>Summary Report</u> of the earlier studies.
- * Members of the Summary Report Advisory Committee for their counsel about items to be included in this report.
- * Seerley Reid, formerly Assistant Director, Educational Media Branch, U. S. Office of Education, who drew attention to the need for making the original States Audiovisual Education Study; to U.S.O.E. staff members, Thomas D. Clemens and Hugh F. McKeegan, who encouraged the drafting of the proposal which made preparation of the Summary Report possible; and to Gertrude G. Broderick, Educacational Media Specialist, the Project Monitor, who has been most helpful in making suggestions to the authors which have not only saved time, but given direction to its development; and to Thomas I. Gunn, Manager of the Sacramento State College Foundation, for his administrative assistance in carrying the Summary Report operations forward.
- * Laurence D. Kearney, Administrative (Legal) Advisor, California State Department of Education, for his suggestions for summarizing the legal study and his careful, painstaking review of the condensation before its inclusion in this report.
- * Lee E Campion, Carolyn Crawford, Paul S. Flynn, James E. Harbin, Dale C. Hartzler, C. L. Kessler, Marcus Konick, Clyde K. Miller, L. J. Olsen, John H. Persell, Harry J. Skelly, Fred L. Villa, and Robert C. Wheeler, who as state department of education officials responsible for audiovisual education activities assisted in interviews covering their respective states.
- * Harold Caldwell, James Hardie, Anna L. Hyer, Marcus konick, Barry Morris, Henry C. Ruark, Jr., and Fred L. Villa who reviewed the draft copy of the <u>Summary Report</u>.
- * James W. Brown and Elizabeth S. Noel, members of the Summary Report staff, for their work in writing portions of the report and editing the entire manuscript; Ruth Noel for compiling and checking much of the data; Ruth Aubrey and Lanita Lane for the preparation of the graphics; and finally to Kate Pemberton for typing and proofing the entire report.

As the <u>Summary Report</u> goes to press, it is anticinated it may become available on microfilm from the USOB. (Write Dissemination Branch for further information.)

Francis W. Noel Kenneth D. Norberg



TABLE OF CONTENTS

Hapter		Page
	PREFACE	111
1	BACKGROUND TO THE REPORT	1
2	national patterns in state department	
	of education nem/av services	19
3	nem/av developmentpast and future	
	OPINIONS OF RESPONDENTS	45
4	recent information on state	
	NEM/AV PROGRAMS	51
5	STATE LAWS PERTAINING TO	
	NEM/AV ACTIVITIES	105
6	SUMMARY AND CONCLUSIONS	125
	SELECTED BIELLOGRAPHY	135

Chapter 1

BACKGROUND TO THE REPORT

Our nation's total educational effort is greater today than during any comparable period in history. Reforms are occurring rapidly as nearly every aspect of education is examined. There is serious effort at all levels to improve traditional offerings and methods of teaching and to introduce needed innovations for the benefit of students now crowding into our schools.

Changes are occurring not only in the content of education but in the means of instruction. A new technology of education is seen to be developing—a technology that focuses on the increased communicative power of improved audiovisual media. Increased attention to these technological tools has proved to be a boon to teaching at all levels.

State departments of education, as the constitutional agencies responsible for the over-all direction of school programs, must concern themselves with these changes. State department of education staff members (particularly those responsible for various audiovisual services and activities) have expressed need for more information concerning state level practices, trends, and problems of this technology. The significance of this need is further emphasized by several other recent developments and especially by the series

These growing interests in the orderly development and improvement of audiovisual education practices and services of state departments of education thus prompted publication of this <u>Summary Report</u> of an earlier study known as the <u>States Audiovisual Education Study</u> (<u>SAVES Study</u>). First published in 1963 in two extensive



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Reference is made here to the Elementary and Secondary Education Act of 1965 (P.L. 89-10), the Economic Opportunity Act (P.L. 88-452) and the National Defense Education Act, Extension and Revision (P.L. 88-665).

of national legislative enactments that have served to intensify their interest in educational media activities generally.

The SAVES Study (also called the SAVES Report) was conducted by the School of Education of the University of Southern California between March 1961 and January 1963, pursuant to Contract SAE-9415 under Title VII-B of the National Defense Education Act of 1958, administered by the United States Office of Education of the Department of Health, Education, and Welfare. This research study was titled, Practices of State Departments of Education in New Educational Media/Audiovisual Education During 1960-61, Volumes I and II (Appendices).

volumes, the original report contains detailed analyses and information regarding audiovisual (new educational media) programs

operating in each of the 50 states. Although that study still serves as a reference point in the developmental sequence of the state programs in this field, its usability is somewhat restricted by the detailed comprehensiveness of its coverage and the limited availability of copies. Dissemination of selected information from the earlier SAVES Study in a Summary Report thus appears to be needed. Such information may serve many useful purposes related to planning, developing policies for, improving, and evaluating educational media activities in state departments of education. Media specialists, college instructors, school administrators, and those interested in research may also find such data of value.

Purposes of the Summary Report

The Summary Report provides a variety of data and interpretations of data. Specifically, it:

- * Describes the research design and procedures employed in the original <u>SAVES Study</u> (Chapter 1);
- * Examines and discusses certain 1960-61 national patterns of new educational media activities in the 50 state departments of education, with special attention to: (a) organization and finance, (b) leadership activities, (c) operational services and activities, (d) research and development, and (e) regulatory activities (Chapter 2);
- * Reports 1960-61 opinions and observations of state department of education personnel in the 50 states concerning growth, needs, problems, and anticipated future developments in the educational media field (Chapter 3);
- * Compares the 1960-61 and 1964-65 plan of organization and activities for new educational media in five selected states (Hawaii, California, Connecticut, Pennsylvania, and New York) (Chapter 4);
- * Compares selected aspects of the 1960-61 and 1964-65 status of and significant changes in new educational media programs in the 50 states on the basis of responses to a questionnaire circulated to and completed by members of the Association of Chief State School Audiovisual Officers (ACSSAVO) and containing items identical with the earlier SAVES Study questionnaire (Chapter 4);
- * Summarizes and comments on legislation (as of 1960-61) affecting new educational media activities in the 50 states (Chapter 5);
- * Discusses and comments on the research findings reported in this summary (Chapter 6).

Abbreviations and Special Terms Used

To save space and avoid needless repetition, the following abbreviations and terms are used throughout this report:

* SDE designates the State Department of Education, chief administrative school unit of each state government

(used for both single and plural references). The term "department" is used here to indicate the entire chief state school agency.

- * SAVES is an abbreviation for the States Audiovisual Education Study, also referred to as the SAVES project or the SAVES Study. The published findings of this research study, Practices of State Departments of Education in New Educational Media/Audiovisual Education During 1960-61, Volumes I and II, are called the SAVES Report.
- NEM/AV is an abbreviation for educational media and/or audiovisual education. Although new educational media (NEM) were a prime concern of the SAVES project because of contract obligations and the impact of the National Defense Education Act (NDEA), audiovisual (AV) education was also included because this proved to be the most common term used in state departments of education for the activities involved. NEM/AV specifically refers to such media and instructional tools as open- and closedcircuit educational television (ETV), radio, motion pictures, programmed materials with or without teaching machines, tape recordings, overhead projectors, language laboratories, as well as some of the more conventional audiovisual instructional materials (charts, exhibits, filmstrips, slides, maps, globes, and study prints) and projection equipment.
- * ACSSAVO refers to the Association of Chief State School Audiovisual Officers. Members of this association (with only a few exceptions) are professional staff members of the SDE who are responsible for NEM/AV programs.
- * <u>USOE</u> is an abbreviation for the United States Office of Education, Department of Health, Education and Welfare.

Earlier Studies of New Media Activities, State Departments

Two earlier surveys of state audiovisual education programs reported the status of audiovisual education. In 1947, the research division of the National Education Association investigated functions of bureaus and agencies responsible for audiovisual activities at the state level, the personnel involved, and budgetary expenditures. A few of the states reported briefly on plans



Audio-Visual Staff and Organization in State Departments of Education, Research Division, NEA, February 1948.

for future development. Results of this unpublished study, reported more fully in Volume II, Appendix C of the SAVES Report, showed that at that time (1947):

^{1.} Only sleven states had a "special unit" responsible for audiovisual education.

^{2.} Mine states had a separate budget allotment exclusively

for the audiovisual program. The largest amount appropriated to a central office was \$120,000 in Ohio. However, in California where the program was decentralized, more than \$800,000 in state funds were allocated to offices of county superintendents of schools earmarked for audiovisual education services. These were in addition to funds for the department's Bureau of Audiovisual Education.

- 3. The largest number of professional audiovisual workers in any single state office was four.
- 4. Nine states distributed audiovisual materials to local school systems.
- 5. Nine states and Hawaii (then a territory) were endeavering "to promote interest in audiovisual instruction" among educators in their area.
- 6. Ten states "advised teachers on the use of audiovisual aids."
- 7. Seven states and Hawaii reported that they reviewed motion pictures and "listed those suitable for use by schools."
- 8. Seven states and Hawall inspected audiovisual equipment and "listed items suitable for purchase by schools."
 - 9. Two states prepared and broadcast school radio programs.
 - A second status study conducted in 1957 by the Office of

Education (USOE) sought to provide: (1) a national overview of the various ways in which state departments of education provided audiovisual education leadership, and (2) a state-by-state comparison of the performance of such functions and services. This survey obtained binary and quantitative responses to specific questions about such items as leadership and operational services, regulatory functions, staff organization, personnel qualifications and financial provisions. Quantitative in nature, the data were presented in summary tables. The principal findings of this unpublished study showed that:

The preliminary report of this study in summary form, the only report available, is reproduced in Volume II, Appendix C of the SAVES Report.

Audiovisual Education in State Departments of Education, Visual Education Service, Office of Education, United States Department of Health, Education, and Welfare, Washington, D. C., July 1957. While some of the items discussed here are similar to those in the NEA study, the two studies are not comparable statistically since wording of the questions was dissimilar, and the number of states responding to questions varied for different items.

^{1.} Twenty-one states had an "organizational unit" devoted to audiovisual education.

- 2. On a national basis, 42 full-time professional staff members were assigned to audiovisual education responsibilities.
- 3. Eight states reported having an identifiable budget for audiovisual education activities.
- 4. Twenty-seven states distributed audiovisual materials to school districts.
- 5. Forty-five states advised teachers and administrators on the use of audiovisual education materials.
- 6. One state reported having published standards or recommendations concerning specifications for audiovisual education equipment; 47 states reported they did not.
- 7. Forty-five states reported state aid funds to local school districts which could be used for audiovisual purposes.
- 8. Twenty-seven states prepared and published during the previous two years a publication dealing in some way with audiovisual education.

The NEA study (1947) marked an historical first effort to provide a nationwide accounting of the organization and activities in audiovisual education in state departments of education. The 1957 U. S. Office of Education survey signified a second attempt to provide a national overview of audiovisual education in state departments of education. These two studies served to stimulate audiovisual activities in state education offices as they became the bases of discussion in professional conferences; they gave needed direction to the expansion of such functions and services at the state level. They also suggested a number of important areas in need of further study; these were included in the third and most comprehensive investigation, the States Audiovisual Tducation Study, summarized and partially updated in this blication.

The States Audiovisual Education Study (SAVES)

The purpose of the 1960-61 States Audiovisual Education Study (SAVES) was "...to describe current practices and activities of the fifty state departments of education related to new educational media and audiovisual education (NEM/AV) and possible future trends in these areas of education." The status of each state

Practices of State Departments of Education in New Educational Media/Audiovisual Education During 1960-61, Vol. I, Chapter I, p. 1.

program and the nature of certain discernible national patterns were to be described in detail, but omitting direct comparisons of states.

Research Design. The research design of the SAVES project was based on use of an 18-item questionnaire to be answered by the appropriate state school officer in each of the 50 states. A



follow-up personal interview was also used. The schedule of questions for each personal interview was prepared from a master interview schedule which developed in greater detail the information requested in the questionnaire but tailored the interview questions to preliminary responses provided earlier by each state. Additionally, several questions were developed which requested the opinions of state department of education officers on the development and future of new educational media at state and national levels. All 50 states completed and returned questionnaires and cooperated in completing the interview phase of the study. In addition, SDE officers provided many different state publications which were used later as confirming and clarifying documents. Reports of NEM/AV legal provisions in all 50 states, a study?

John W. Connelly, Jr., State Laws on Audio-Visual Media of Instruction in Public Schools and on Establishment of Educational Television Stations, U. S. Office of Education, 1962. This study called the Connelly Report is summarized in Chapter 5 of this report.

completed under a separate NDEA contract, were also available as supporting documents.

Processing the data derived from the SAVES project took two directions, one descriptive and one tabular. Descriptive reports for each state followed a standard format based on broad functions exercised by state departments of education. Tabular data provided information from which national patterns of state activities were derived. Opinions of respondents, summarized according to similarity of ideas, gave the basis for assessing expected national changes and state needs in the NEM/AV field as perceived by respondents. Findings of the study were reviewed by the project staff in an erfort to identify and discuss factors, problems, practices, and needs bearing importantly on the role of state departments of education in new educational media and audiovisual education activities. This last portion of the study (Volume I, Chapter V, SAVES Report) was subjective in nature.

SAVES Questionnaire and Interview Schedule. The SAVES questionnaire was concerned with leadership and regulatory

SAVES Report, Vol. II, Appendices, Appendix D, pp. 1-2.

functions and services of state departments of education. It gave special attention to those capable of affecting classroom uses of new educational media. Questions in Part A of the questionnaire, for example, dealt with the following aspects of state department of education "new media" activities:

- 1. Advice to local school personnel, by department specialists, on classroom uses of new educational media,
- 2. Consideration of new educational media in curriculum planning and the preparation of courses of study.
 - 3. Conferences and workshops on the classroom uses of new

educational media.

- 4. Uses of new educational media in other conferences and workshops conducted by the department.
- 5. Consideration of the use of new educational media equipment and materials as a factor in the accreditation of public schools.
- 6. Consideration of competency in the use of new educational media equipment as a factor in the certification of school personnel.
- 7. Provision for the use of new educational media equipment and materials in school plant and equipment standards.
- 8. Grants to local school districts to be used for the purchase of new educational media equipment and materials.
- 9. Preparation of publications for teachers or administrators on uses of new educational media.
- 10. Collection of statistics on uses of new educational media in public schools.
 - 11. Production of new educational media for classroom use.
- 12. Distribution of new educational media materials to public schools.
- 13. Creation or sponsorship of broadcast or closed-circuit educational television programs.
- 14. Conduct of activities concerned with teaching machines and programmed learning.

Part B of the SAVES questionnaire asked respondents for explicit information on the organization, personnel, and financing of the SDE unit or units devoted to NEM/AV activities. "Yes" and "No" replies to questions were followed by other requests for further specific information, more detailed explanations, and/or supporting documents or publications.

The purpose of personal interviews with appropriate SDE officers, which followed the return of questionnaires, was to build on the information reported on the earlier questionnaire. For these interviews, questions from a 76-page master interview schedule9 were used. These were selected according to the nature

of specific state responses to individual questionnaire items. In general, when a state officer responded "Yes" to a questionnaire item, a series of questions was used to obtain the full details of the specific activity involved. In general, when the state responded "No" to the questionnaire item, a different series of questions was used to develop details of alternatives used by the SDE in the specific activity involved.

Example. Questionnaire item 1 of Part A follows:

Leadership services to schools

Do State Department of Education personnel, in providing leadership services to public elementary and secondary schools,



SAVES Report, Vol. II, Appendices, Appendix D, pp. 20-97.

normally advise teachers and administrators on the classroom uses of new educational media? Yes No
If "yes": CHECK () the phrase which most nearly describes who provides such services. Department staff generally New educational media staff primarily, others occasionally New educational media staff only
If the respondent answered "Yes" and checked "Department staff generally", as the phrase most nearly describing who provided such services, in the personal interview he would be asked the following additional questions selected from the master interview schedule:
In your answers to the questionnaire you indicated the department staff, in general, provides advice to teachers and administrators in the classroom uses of new educational media. Could you provide some additional information regarding these staff members?
1. What general title would you apply to the staff members who give advice regarding new educational media? Would you indicate the number of persons involved and whether they are part-time or full-time in the position indicated by title?
Number of Number of Full-time Part-time Staff Staff
a. General Supervisors b. Subject-Matter Supervisors c. Department Staff Consultants d. Professional Specialists (Finance, School Plant, etc.). e. Outside Consultants (non-staff members) f. Others
2. For the staff members indicated, what would you estimate as the average number of times each staff member provided advice and assistance regarding new educational media for teachers and administrators? Consider only the number of times the assistance would require approximately four hours of the staff member's time; estimate the number of services rendered in a twelve-month period.
a. Average number of services per staff member b. Unable to estimate
nterviewer: Mark only non-duplicating categories for any one type of personnel.



	a.	# Regions served by # of
	,	(Personnel Title)
	1 6	#Total Regions in State
	b.	#Counties served by #of(Personnel Title)
		# Total Counties in State
	c.	# Elementary Districts served by # of
•	;	(Personnel
		#Total Elementary Districts in State
	a	Title)
	d.	# Secondary Districts served by # of (Personnel
		# Total Secondary Districts in State.
		Title)
	e.	#Combined Districts (Elem. and Sec.) served by
		#of
	_	(Personnel Title)
	f.	()Unable to estimate districts served
	4.	The requests for advice regarding new educational
		a probably come in a number of ways. Could you give
		e ranking or percentage estimates which would indicate
	the	major and minor sources of requests for help?
		Sources of requests for help Ranking or
		with new educational media come Percentage of
		to the attention of department staff Requests from
		Sources
	a.	Mail and/or phone inquiries
	b.	to department
	~,	districts
	c.	
		departments
	d.	Informal contacts at meetings
	e.	Other sources
	f.	
If th	ne re	eply was "No" to the questionnaire item 1, the respondent
was a	sked	during the personal interview this set of questions:
	In y	your answers to the questionnaire you indicated that no
		artment personnel would normally advise teachers and
	admi	inistrators on the classroom use of new educational media.
	Coul	ld we refer directly to the copies of the questionniare
	and	check this?
	1.	Would you read the questionnaire again and indicate
	-	your response at this time?
		aResponse is the same: "No" to the main question
		in 1. Continue with the questions directly
		below on this page.
		b. Response is "Department staff generally."
		Refer to the Interview Schedule, Item 1, Code 1.3
		Response is "New educational media staff
		primarily and others occasionally." Refer to the Interview Schedule, Item 1, Code 1.4
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- Response is "New educational media staff only."

 Refer to the Interview Schedule, Item 1, Code 1.5
- Could you clarify the situation regarding no personnel providing new educational media advice to teachers and administrators? Would you say this because......
 - a. Local schools would be able to handle the situation.....
 - b. There are insufficient requests to justify providing such a service......
 - c. No qualified department personnel are available to render this service to teachers and administrators.

A second phase of the personal interview directed attention to departmental policies or attitudes toward various aspects of the new educational media situation. Policy-oriented questions related to: (1) centralization or decentralization of materials distribution centers, (2) production of materials for local school use, and (3) relationship of SDE educational media activities to professional NEM/AV organizations.

Attitudinally-oriented questions were also employed. These related to estimates of amount of interest in and attitudes toward the use of educational television, teaching machines and programmed learning, language laboratories, overhead projection and 8mm sound motion pictures on the parts of teachers, administrators, and supervisors throughout the state.

A third phase of the interview focused on personal opinions of the interviewee about observed trends in NEM/AV activities in his state on the basis of changes believed to have taken place during the preceding fifteen years.

The final phase of the personal interview sought to collect opinions from each respondent concerning future developments or major changes believed likely to occur in the NEM/AV field nationally in the next ten years, and in the light of these projected changes, to identify the principal NEM/AV needs of his state. This part of the interview, recorded on tape, was relatively unstructured; respondents were assured their statements would remain completely anonymous.

Data obtained from the use of these questionnaire items and interview procedures were tabulated, analyzed, and presented in the final <u>SAVES Report</u> as:

1. A summary, in descriptive and tabular form, of national patterns of the activities in state departments of education. The national patterns included SDE evaluations of teacher and administrator interest in currently prominent educational media and an assessment of

- changes related to the growth of NEM/AV over the past fifteen years. (Chapter II, SAVES Report)
- 2. Fifty descriptive reports—one for each state—of its NSM/AV activities and services. Individual state reports included a summary of replies to the policy—oriented questions. (Chapter III, SAVES Report)
- 3. A summary, together with descriptive tables, of expected NEM/AV developments in the national scene and state needs in this field. (Chapter IV, SAVES Report)
- 4. A discussion, based on the findings of the study of factors, problems, practices and needs that might affect future NBM/AV developments in state departments of education as seen by the SAVES project staff. (Chapter V, SAVES Report)
- 5. A source list of selected NEM/AY publications by state departments of education which had been used as supporting documents for the study. (Chapter VI, SAVES Report)

The SAVES Project Staff and Cooperating Groups. While the regular continuing staff of the SAVES project was small, more than two hundred persons were involved, in one way or another, in planning and conducting the study and in completing the final report. Individuals, organizations, and groups served in the following capacities:

Project Staff. The director who administered the project

SAVES Project Staff: Francis W. Noel, Director and Principal Investigator; Sidney C. Eboch, Project Manager; Elizabeth S. Noel, Research Associate; Desmond P. Wedberg, Administrative Assistant. Field Interviewers: James W. Brown, Bernard R. Kantor, Irving R. Melbo, Barry V. Morris, Elizabeth S. Noel, Francis W. Noel, Paul V. Robinson, Graphic Artist: Dennis C. Dailey.

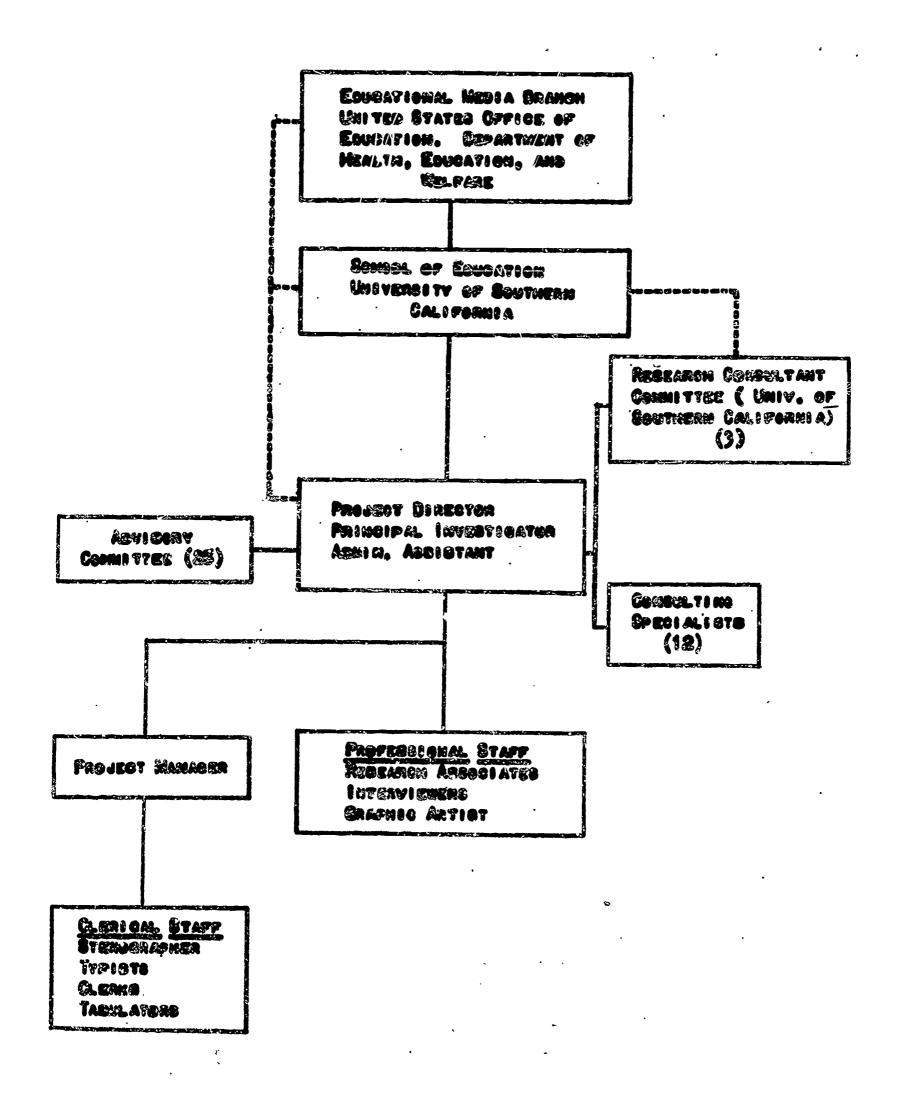
also served as principal investigator. He and a professional staff of four persons were responsible for developing question-naire and interview schedules, conducting interviews, analyzing and summarizing data, preparing state summaries, and writing and editing working drafts and the final report. To complete the staff, secretarial assistance, additional interviewers, and a graphic artist were also employed as needed. The organization chart for the SAVES staff appears in Figure 1.

* U. S. Office of Education and University of Southern California. 11 Responsibility for carrying out the study

Il Specifically, Seerley Reid, Assistant Director, Educational Media Branch, U. S. Office of Education, Washington, D. C., and Irving R. Melbo, Dean, School of Education, University of Southern California, Los Angeles, California.



PIGURE 1. SAVES PROJECT STAFF (CASAMIZATION)



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within the framework of governmental and institutional policies and procedures was shared by the U. S. Office of Education and the University of Southern California.

- * Advisory Committee. Twenty-eight officers and representatives of national organizations, the U.S. Office of Education, institutions of higher education, and industries in the NEM/AV field comprised the SAVES Advisory Committee. This group developed guidelines to determine the kinds of information needed and approaches to be used in conducting the study. It recommended, for example, that the status of each state NEM/AV program be described and that national patterns and trends in the NEM/AV field be identified. The group concurred with officials of the USOE and recommended against making direct comparisons of state programs.
- * Research Consultant Committee. 12 Three specialists from

12 SAVES Report, Vol. I, p. iii lists their names.

the University of Southern California (a Research consultant Committee) helped to develop the research design, to check the validity of proposed techniques, and to brief interviewers on proper interview procedures.

* Consulting Specialists. 13 Twelve persons, selected for

SAVES Report, Vol. I, pp. vii-viii, lists the names of these consultants.

their knowledge in the NEM/AV field, consulted on call with the SAVES staff concerning special aspects of the study. They also provided a critical review of the proposed questionnaire. Some of these same individuals also served as members of the Advisory Committee.

* State Department of Education Personnel. 14 Officers and

14 Ibid., pp. vii-xvii.

staff members of 50 state departments of education completed the questionnaire, participated in the personal interviews, and supplied supporting documents. They also reviewed and commented upon the descriptive summary for each state and the working draft of the final report. Some of these persons also acted as consultants and advisors to the SAVES project staff.

Phases of the SAVE Study. Operationally, the SAVES project had three phases, as follows: (1) design of the research project and activation of the necessary administrative organization, (2) conduct of the study and processing of the data, and (3) preparation of the working draft, final report, and related appendices.

Several principal steps in carrying out the SAVES Study may be identified as follows:

Planning the Study. The purpose and scope of the study, the research design and procedures were developed cooperatively by the Project Director with representatives of the USOE, the NEM/AV Consulting Specialists, the SAVES Advisory Committee, and the University of Southern California Research Consultant Committee. The School of Education of the University of Southern California (the sponsoring institution) was responsible for the professional direction of the project; administration of the project followed the University's business procedures. The Project Director selected the staff upon recommendations from the School of Education.

Conducting the Study. The project staff in cooperation with the USOE prepared the questionnaire which was approved by the Bureau of the Budget. The interview schedule was prepared by

By executive order, the Bureau of the Budget (Treasury Department) was required to approve all questionnaires circulated to more than nine otates by federal agencies or their contractors.

the SAVES Project staff. Questionnaires were sent to the 50 state departments of education and following their return the SDE respondents were interviewed at length by field interviewers. Questionnaire and interview data were tabulated and analyzed as a basis for developing national patterns. Summaries of data and information obtained from the interviews were prepared to a standard format and submitted to state respondents for correction and approval.

Previous studies were an syzed for the purpose of trying to make a comparison with the findings of the SAVES Project, but this proved to be impossible. SDE publications which had been submitted were reviewed for possible inclusion in a bibliog. Aphy or source list.

Preparing the Working Draft and Final Report. Compiling, analyzing, and reporting data were tasks shared by the entire professional staff. Writing and editing the working draft were largely the responsibility of three staff members—the Project Director and two Research Associates. The working draft was submitted to all SDE respondents for review and comment.

The findings and recommendations of the study comprised Volume I of the final report16 (634 pages). The appendices

It is anticipated that the final report of the SAVES Study may be obtained on microfilm from the USOE. (Write Dissemination Branch, USOE, for information.)

were published in a separate and second volume (448 pages). Included in the Appendices were: discussions of two earlier research studies (summarized in this chapter); the working papers of the SAVES Project; the reprint of the final chapter from the study of state laws related to NEM/AV and educational television;



and comments and reactions received from SDE respondents about the working draft of the study. The final report (Volumes I and II), was transmitted to the U.S. Office of Education in January, 1963,

Study of State Laws Pertaining to Educational Media Activities

Concurrent with the SAVES project was a separate investigation of State Laws on Audiovisual Media of Instruction in Public Schools and on Establishment of Educational Television Stations. 17

17A study in two volumes, conducted by John W. Connelly, Jr., under NDEA Contract OE 2-17-603, Office of Education, U. S. Department of Health, Education, and Welfare, Washington, D. C., 1962.

conducted under Title VII-B of the National Defense Education Act of 1958. The extensive findings and discussion of legal foundations for state activities in new educational media and audiovisual education are summarized in Chapter 5 of this Summary Report.

Updating Certain Aspects of the Original Study

To show various ways in which growth has taken place since 1960-61 and to indicate possible trends in NEM/AV developments at the state revel, this report, in addition to summarizing the original States Audiovisual Education Study, (1) describes the NEM/AV activities in five states (limited sampling) for 1960-61 together with updated (1964-65) information on these activities, (2) presents in tabular form updated information for selected items in the earlier SAVES questionnaire, and (3) discusses the significant developments in the various states as reported in the updating questionnaire. (See Chapter 4.)

Procedures for updating the SAVES Report included the following steps:

* Distribution to all 50 states by ACSSAVO of a questionnaire for 1964-65 which (a) included items identical to those in the 1960-61 questionnaire; 18 (b) called for a

18 All references to materials for use in the interviews in the original questionnaire were omitted from the 1964-65 version.

listing of significant NEM/AV developments since 1960-61; (c) contained three questions concerning the influence of NDEA on NEM/AV programs; and (d) requested any information which the SDE had released about plans to implement the Elementary and Secondary Education Act of 1965 (Public Law 89-10).

Personal interviews by the Project Director and Editorial Director with SDE personnel responsible for NEM/AV activities in thirteen states, from which five were selected for the descriptive reports of their NEM/AV programs and activities contained in Chapter 4 of this Summary Report.



* Processing of data obtained from the ACSSAVO questionnaire and personal interviews for the purpose of updating the original findings.

Comments and Recommendations by Summary Report Staff

The <u>Summary Report</u> project staff will, in the final chapter, (1) discuss the findings of the SAVES project reported herein, (2) comment upon NEM/AV activities in the various states as reported and as observed by staff members, (3) raise questions concerning future developments in the field, and (4) make recommendations which they consider to be pertinent and perhaps useful to educators with NEM/AV responsibilities in state departments of education and elsewhere.

Summary Report Project Staff and Cooperating Groups

The Staff. A Director 19, a Co-Director, an Editorial Director,

Dr. Francis W. Noel, Project Director, was formerly Director and Principal Investigator, SAVES project, and also the Chief of the Bureau of Audiovisual Education, State Department of Education, California.

Dr. Kenneth D. Norberg, Project Co-Director, was formerly Department Editor, <u>Audio-Visual Communication Review</u>; Head of the Title VII Program, U. S. Office of Education (1958-59). Presently, he is Professor of Education and Coordinator of Audio-Visual Services, Sacramento State College, Sacramento, California.

Dr. James W. Brown, Editorial Director, served earlier as Consultant and Field Interviewer for the SAVES project. He was formerly Director of Teaching Materials, Virginia State Department of Education. He is presently Dean of the Graduate Division, San Jose State College, San Jose, California.

Elizabeth S. Noel, Editorial Associate, served earlier as Research Associate for the original SAVES project. She was formarly Curriculum Director, Yolo County (California) Public Schools, Sacramento, California.

and an Editorial Associate comprised the small part-time staff. Other professional and clerical personnel were employed as needed.

ACSSAVO. The Association of Chief State School Audiovisual Officers as a group discussed the proposed Summary Report and the need for updating the original SAVES questionnaire in all 50 states, if it were possible to do so. The organization distributed the updated questionnaire. Chapter 4 includes the updated information which was obtained from the 46 states returning the ACSSAVO questionnaire. Members of this group were interviewed along with other SDE personnel in states where interviews were held.

Advisory Committee. A small group comprised of fifteen educators who had been identified with SAVES and who also represented national organizations concerned with NEM/AV, the U.S.

Office of Education, institutions of higher education and persons knowledgeable in the educational media field served on the Advisory Committee.

Members of this group were asked to indicate on a rating scale the relative importance of the NEM/AV activities surveyed in the original study for inclusion in the Summary Report. The results showed wide differences of opinion among the group with no substantial agreement that one item was more important than another. Most items were of particular importance to several of the respondents. On the basis of this sampling of opinions the Summary Report staff decided to summarize insofar as it was possible all the activities reported in the original study.



Chapter 2

NATIONAL PATTERNS IN STATE DEPARTMENT OF EDUCATION NEM/AV SERVICES

Many factors are known to influence the administration and operation of state educational systems. In this connection, especially significant factors appear to be those pertaining to: (a) geography—the physical environment of the area served, (b) size and density of population, (c) the effects of tradition, (d) ability to provide financial support, and (e) the effects of legal provisions of applicable school laws.

Geography and the Physical Environment. Climate, terrain, natural barriers, and the presence or absence of natural resources are known to affect the manner in which state departments of education discharge their responsibilities. The situation in Maine, as reported for 1960-61 in the original SAVES Report, 1

SAVES Report, Vol. I, Chapter V, p. 3.

is illustrative. There, dense forests and extreme cold with heavy snows render nearly forty-four per cent of the state's land area inaccessible and nearly uninhabitable. The population is too small and scattered to provide full support for municipal government or local school districts. Thus, in effect, the SDE is required to operate, from the state level, a single school district administrative unit. Again, because the physical environment makes it impractical to transport school children during most of the year, those living along the northern border of Maine attend (by contractual arrangements) nearby Canadian schools, taught in French. This arrangement, in turn, makes it necessary for the SDE to provide summer school classes in English and American history for these same children.

Population Size and Density. Extreme variations of population density also influence the character of education within a state. An example of this fact is found in our second youngest and largest state, Alaska, which in 1960 had a school enrollment of 46,929 pupils, or .08 pupils per square mile. Rhode Island, on the other hand, the smallest and one of the oldest states, had a school enrollment of 856,483 pupils, or more than 700 pupils per square mile. Similar examination of the school system of each of the 50 states would reveal that the organization, administration, and supervision of its schools are directly affected by these same differences of population density. Likewise, the curriculum offerings, the availability of teachers, and the kinds and numbers of instructional materials would be found to be different for each Thus, it easy to understand why kits of study materials might need to be sent to the homes of pupils in some parts of Alaska for home study, whereas pupils in Rhode Island might have daily access to enriched films and numbers of tapes from the SDE library.

Traditions. Traditions, folk-rays, and values held by people



who make up a state's population also affect the role of the SDE and the functions it performs. For instance, the vigorous and traditional independence of local communities in the conduct of educational affairs is found to be a factor bearing on the extent of SDE leadership in a number of states. One New England SDE official, in commenting on the problem of enforcing state school building codes, said, "Law or not, we have to work with and through the town meeting. It is often more powerful than the school board. You just can't tell them they have to do anything, especially if it's regarding their schools and you are from either the state or federal government." Similarly, in a midwestern state an SDE official quoted the president of the rural school board who said. "We'd rather make our own mistakes than be told what to do by some state official." In contrast, the SDE official in another state remarked, "Our big problem is, we just can't keep up with the requests for help from local and county school people; that goes for both the professional educators, and the lay public as represented by boards of education. They feel it's sort of a business partnership."

Ability to Provide Financial Support. A comparison of the rank order of the three states having the biggest per capita income and three having the lowest per capita income with the dollars each spends per pupil on education illustrates important differences in the ability of states citizens to support an adequate educational program (1960-61).

Rank per capita _ income	State	Rank per pupil \$ expenditure
1	Delaware	5
2	Connecticut	15
3	Nevada	<u> </u>
48	South Carolina	49
49	Arkansas	44
50	Mississippi	48

Again, by rank, a comparison of the three highest and three lowest states in per-pupil-dollar-expenditures with the percapita income of each reinforces this point.

Rank per pupil \$ expenditure	State	Rank per capita income
1	Alaska	8
2	New York	4
3	New Jersey	. 7
48	Mississippi	50
49	South Carolina	48
50	Alabama	47

Legal Provisions. State laws governing the responsibilities and functions of the SDE not only vary greatly as legal instruments, but also in their effect on state educational programs. In



New York, for example, the Board of Regents of the University of the State of New York² is constitutionally empowered to establish,

The University of the State of New York and its Board of Regents include the units which in other states are referred to as the state board of education and the state department of education.

govern, and operate the public educational system of that state; thus, without legal reference to the governor and the state legislature the University of the State of New York could and did establish an educational television station in New York City.

In California, the State Board of Education and the Superintendent of Public Instruction (who is also the State Director of Education as well as the administrative head of the California State Department of Education) have no authority except that specifically delegated to them by the state legislature. Thus, the state education code (containing legislative enactments for education) becomes the reference of educators in determining the extent and nature of their educational authority and duties. Since ETV was not mentioned in the education code the SDE was required to go to the state legislature to seek enactment of laws to grant it certain powers and responsibilities regarding educational television.

National Patterns of NEM/AV Activity

National patterns of NEM/AV organization, practices, and services in state departments of education, as presented in the original <u>SAVES Report</u>, were based upon data assembled from mail

3SAVES Report, Vol. I, Chapter II, pp. 1-115.

questionnaires and information reported from personal interviews with SDE personnel. These were brought together in twenty tables accompanied by comments for each. Only one of the twenty tables reported data obtained from a single questionnaire item; fourteen tables combined data secured from the questionnaires and interviews; five of the tables drew entirely upon information obtained from personal interviews. National patterns, thus developed, are summarized in this chapter.

NEM/AV Activities in Each of the Fifty States. Descriptions of each state's NEM/AV services and activities for the year 1960-61 were based on tabular and descriptive data drawn from question-naires and interviews. These were reported under four headings: (1) NEM/AV Organization: Personnel and Finance; (2) Regulatory Functions; (3) Leadership Services; and (4) General Policies and Comments. Each state report was an independent unit written to the standard format just described. Within this format each attempted to describe the diverse practices within a particular state and yet preserve the uniqueness of that state's NEM/AV activity. These descriptions are contained in Chapter III (397 pages) of the original study.



The individual state reports, 4 compressed as they were in

State reports were prepared by three members of the SAVES project staff who had conducted seventy per cent of the interviews. Reports based on interviews conducted by other than the writer of the state's report were submitted to the original interviewer for correction and comment. Before publication, all state reports were submitted to the principal respondent in each state for correction and/or approval.

the original report, were intended to serve as references for each state and as baselines for future investigations. It was the opinion of the Summary Report staff that, because these descriptions could not be substantially reduced in length, they could not be included in the Summary Report. 5 However, it was agreed that

With minor deletions and some modifications of format, five of the individual state descriptions from the <u>SAVES Report</u> are included in Chapter 4 of this summary, together with up-dating information for those states.

some of the variations and unique practices should be reported in relation to the national patterns. These factors will be discussed in this chapter together with the national patterns in the manner described.

What This Chapter Does. This chapter summarizes certain national patterns of NEM/AV activities in state departments of education during 1960-61 and describes selected practices and variations in NEM/AV activities among the various states.

Variations in NEM/AV practices relative to national patterns are illustrative only. Their appropriateness as an SDE function is not indicated.

Additionally, "promising practices" noted by the project staff in the course of their interviews (reported in Chapter V of SAVES Report, Volume I) are used where appropriate.

This information is discussed under the following headings:

- * Organization and Finance
- * Leadership Activities
- * Operational Services and Activities
- * Research and Development
- * Regulatory Activities

The final section of the chapter summarizes national patterns of teacher and administrator interests and attitudes with respect



to currently prominent media. These matters will be discussed under the heading of "Interests and Attitudes Toward New Educational Media."

For purposes of this summary, it has been necessary to combine some of the tables and to exclude many statistics, many

In reporting tabular information, numbers may not add up to a previously presented total. All states did not answer every question or part of a question. "No responses" are not always included in this summary.

of the detailed analyses of data, and certain descriptive materials contained in original chapters of the SAVES Report. The authors have tried to select those items which, in their judgment, relate most closely to central functions of NEM/AV programs as well as those related to some important, unresolved issues of the NEM/AV field. Certain selected items also reveal a historic relationship to items in earlier studies and to the recently up-dated information on NEM/AV activities reported in Chapter 4 of this summary,

Organization and Finance

Within the 50 states of the United States there is wide variety in types of activities carried out by state departments of education. There is, likewise, considerable variation in ways of organizing these activities to handle state needs, in responsibilities allocated to individuals, departments, or units, and in the assignment of state department staff to perform required services. Financial practices show similar variations among the states as do budgets provided to support NEM/AV programs.

The States Audiovisual Education Study (1960-61) undertook to determine: (1) the number of persons who assumed NEM/AV responsibilities within the SDE; (2) which of these positions were NEM/AV designated, which carried "general staff" designations, and which were technical and professional positions; (3) the unit or organi. Ational arrangement within the SDE which provided NEM/AV services; and (4) budget allocations to support the NEM/AV activity.

Personnel Involved in NEM/AV Within State Departments of Education. All the states were asked to list NEM/AV designated personnel in the SDE who devoted ten per cent or more of their time to new educational media activities. Distinctions between audiovisual and television personnel were drawn, but the audiovisual category included instructional materials personnel, audiovisual librarians, audiovisual consultants, audiovisual specialists and others carrying similar titles. Identification of SDE staff personnel without NEM/AV designated titles who carried NEM/AV responsibilities were also requested.

NEM/AV Designated Positions. In the nation as a whole, a total of 75 positions in 32 states carried designated audiovisual titles. Twenty-three of these 32 states reported one or more full-time positions, for a total of 54 full-time positions,



Eighteen states reported no designated audiovisual position, indicating, instead that this responsibility was carried by one or more staff members whose major assignments were outside the educational media field.

In educational television, 33 positions were designated for

This total did not include ETV personnel outside state departments of education who were attached to some other agency of state government.

ll states reporting television activity; 20 of these were full-time.

Combining the positions resulted in a total of 96.35 designated full-time professional NEM/AV positions for the United States as a whole in state departments of education.

NEM/AV Responsibilities Carried by SDE General Staff. To carry out NEM/AV functions, most states in 1960-61 utilized general staff members without special NEM/AV designations. One state reported that three general staff members devoted full-time to NEM/AV activities. Although this was not the case in any other state, general staff members who carried NEM/AV activities in excess of ten per cent of their time totaled 805 in the remaining (48) states. Sixty-two part-time SDE personnel were occupied with NEM/AV activities in seven states. Addition of the number of specifically designated NEM/AV positions (108, including those in educational television) to the number of SDE general staff members (both full- and part-time) with NEM/AV responsibilities, produced a national total of 978 SDE professional persons. The ratio of general staff members with NEM/AV responsibilities to those specifically designated as NEM/AV was approximately ten to one.

General staff members who rendered some NEM/AV services as part of their regular duties included: general supervisors in elementary and secondary education (Idaho); special subject matter supervisors such as consultants in science, mathematics, foreign languages (Colorado); vocational education (Minnesota); professional personnel in guidance (Minnesota); Civil Defense (Minnesota); education of gifted children; and other special educational fields.

As expected, NEM/AV designated personnel (if any) worked closely with SDE general staff members to carry out NEM/AV responsibilities, exemplified by arrangements in two states:

* Illinois—Two Instructional Materials Consultants were assigned to NEM/AV activities within the Division of Instructional Services. They planned and worked closely with more than a hundred staff members of the Division of Instructional Services. By policy, all department staff members were concerned with new educational media and their uses in curriculum development and improvement. It was estimated in a total staff of 107 persons that the equivalent of eight positions were required for departmental NEM/AV activities.



* Arkansas-In the Division of Instructional Materials, one staff member, the Supervisor of Audio-Visual Service, was responsible for the service unit. She directed the state's film library and worked closely with the official Film Selection and Guidance Committee. She also provided consultation to 419 school districts as well as to SDE personnel and lay groups. In the Division of Instructional Services, 13 supervisors gave advice related to NEM/AV matters as part of their regular duties. On occasion, 14 other department staff members also gave NEM/AV advice related to their specialized areas.

It is also to be noted that 13 states utilized 206 persons outside the regular SDE staff as consultants on a part-time basis in carrying out their new educational media and audiovisual activities. Kentucky, an example of such an arrangement, used five part-time consultants having joint appointments in the SDE and in the state colleges to offer limited assistance in NEM/AV in-service programs.

Whether NEM/AV services were handled by NEM/AV designated personnel or by general SDE staff, such services were almost universally on a statewide basis to both elementary and secondary schools, usually handled through an intermediate county, regional, or district unit. In Idaho, however, service was offered directly to individual schools.

Technical and Clerical Patterns. Thirty-six states reported some technical and clerical help in excess of ten per cent of one position. Thus, nearly three-quarters of the states had someone at the technical-clerical level to assist in carrying out state department NEW/AV activities.

Qualifications for NEM/AV Personnel and General Staff with NEM/AV Responsibilities. Job specifications for NEM/AV positions were non-existent in most states. The majority of states did not have requirements specifically related to the discharge of NEM/AV responsibilities. Only five states reported that specialized NEM/AV training or experience was needed for such positions. However, educational and experience requirements for NEM/AV positions were somewhat more clearly delineated. For example, 32 states reported that they did have such requirements for personnel occupying NEM/AV positions in the SDE. Among these states the master's degree was the most common minimum educational requirement. Teaching was the most frequently specified endead requirement; however, school supervision was required in states, and school administration in 13.

NEM/AV Units in SDE. On the basis of questionnaire data supplied, it was learned that approximately sixty per cent of the states reported presence of a unit responsible for NEM/AV programs in the state department of education. However, follow-up interviews showed that these same NEM/AV units ranged in size from one state reporting employment of 96 persons to one tilizing only ten per cent of a single person's time. Yet both states reported presence of a NEM/AV unit. In other states, the SDE was found to be undergoing reorganization and functional organization charts



were either not available, non-existent, or outdated. Clearly, what constituted a NEM/AV unit needed definition and interpretation. No national pattern could be projected on the basis of information obtained.

A review of individual state reports indicates, however, that in 1960-61 the NEM/AV responsibility was generally organized within a "Division of Instruction" (or similarly designated unit) or some subunit of that division, as the following examples illustrate:

- * Connecticut--Here, the NEM/AV service was the prime responsibility of a Consultant in Audio-Visual and Television Education assigned to the Bureau of Pupil Personnel and Special Educational Services in the Division of Instructional Services.
- * Florida--Professional personnel primarily responsible for NEM/AV activities were assigned and operated as members of the Division of Instructional Services; the NEM/AV staff did not function as a separate administrative unit of the division.
- * Illinois—Prime responsibility for NEM/AV activities in Illinois resided in the Division of Instructional Services. Two Instructional Materials Consultants constituted the major portion of the personnel directly assigned to this area.
- * Kentucky--In Kentucky, the Division of Textbooks and Instructional Materials was part of the Bureau of Instruction, a subunit in the section on instruction. This division carried major responsibilities for NEM/AV activity in the department.

In a few instances (Wyoming and Louisiana are examples) responsibility for NEM/AV resided in the administrative division of the SDE. In still another variation, responsibility for educational television and audiovisual education was divided sometimes between divisions or two subunits of a division and occasionally by coordinate positions within a division, as illustrated by the following examples:

- * Georgia -- Responsibility for NEM/AV was primarily vested in the Division of Instructional Materials; educational tele-vision was the responsibility of the Division of Instruction.
- * Alabama--Responsibility for educational television was the major concern of the Coordinator of Educational Television. The School Libraries Consultant gave NEM/AV advice and assistance in the regular course of her duties.
- * Oklahoma--Responsibility for NEM/AV activities was the special concern of two staff members in the Division of Instruction--the Director of Audio-Visual Education and the Director of Television Education.

SDE Budgets for NEM/AV Activity. On the assumption that to a considerable extent goals of any enterprise are reflected in its budgetary planning, and on the further assumption that formal budgets set conditions and limits for the development of most programs,



states were surveyed to determine those having separately identifiable budgets used to support NRM/AV activities. 9 Results showed:

This item did not include state aid funds distributed to schools; these will be discussed later in this chapter.

Eighteen states reported identifiable SDE budgets for NEM/AV activities ranging in amounts from \$9,000 to \$1,000,000. The total amount budgeted in these states was \$2,341,336.

Fifteen states reported estimated NEM/AV budgets of from \$2,000 to \$481,824. The total amount budgeted in these 15 states was \$822,978.

The average annual NEM/AV budget of states reporting identifiable amounts for NEM/AV was \$132,296; this was in contrast to \$54,865, the average of states reporting only estimated budgets. Thus, in those states having identifiable NEM/AV budgets, the average amount budgeted was double that of states using estimates only.

Seventeen states, in all, provided neither identifiable nor estimated budget information.

Leadership Activities

Each state department of education continues to grow and change at its own rate in accord with the state's philosophy and level of educational development. In adapting to changing social, political, and economic conditions, state departments generally appear to pass through at least three stages insofar as their utilization and assignment of responsibilities to professional personnel are concerned. These may be identified as: (1) statistical, (2) regulatory—inspectoral, and (3) leadership.10

Pred F. Beach and Andrew H. Gibbs. The Personnel of State

Departments of Education, Misc. No. 16, U. S. Office of Education,

Washington, D. C., 1952, p. 3. (46 pages)

While maintaining the more traditional statistical and regulatory functions of the past, modern state departments of education are seen, more and more, to perform various leadership functions. These functions are geared primarily to the use of leadership and guidance, rather than regulatory controls, in improving educational programs within a state. Leadership services are generally

shown to involve the performance of a number of high level responsibilities such as: (a) planning and advising on curriculum development programs, (b) providing in-service training for personnel at both state and local levels, (c) preparing publications to implement educational goals, (d) providing leadership in the innovation and evaluation of new methods and materials, and (e) conducting



¹¹ Ibid., p. 4.

research designed to improve an educational activity. 12

12 Ibid., p. 5 (adapted)

Curriculum Development. The SAVES Study sought to determine the number of state departments of education which assisted in the development of curriculum matters as related to NEM/AV. All 50 states reported that this was a leadership service offered to schools. In 21 states the NEM/AV staff generally provided this service, sometimes with the assistance of other staff members.

In 29 states, SDE general staff members were identified as being responsible for providing NEM/AV services as part of their regular assignments.

SDE assistance on NEM/AV matters was provided in a number of ways, of which one was consultation. Descriptions of individual state programs (Chapter III, SAVES Report) show that the following categories of consultation, by both designated NEM/AV personnel and general staff members were conducted:

- * Organization and administration of new NEM/AV units or services (including in some cases, library services) in local school districts or on a regional basis. Consultation was frequently concerned with the improvement and expansion of local facilities.
- * Selection, demonstration, and utilization of materials, equipment, and community resources in the various subject areas at all grade levels.
- * Production and use of simple graphic materials.
- * Preparation, production, and utilization of educational television programs and courses.
- * Dissemination of information about new NEM/AV materials, equipment, and activities.
- * Teacher education in NEM/AV education.
- * Surveys and research projects on NEM/AV services and activities.

NEM/AV consultation activities were carried on by SDE staff members with various other state department of education personnel, coilege and university staffs, school administrators, teacher groups, lay groups, and audiovisual personnel—directors, supervisors, and building coordinators.

Four curriculum development activities were also surveyed in the <u>SAVES Study</u> to determine the extent to which <u>NEM/AV information</u> about audiovisual materials, equipment, and utilization was provided by <u>SDE</u> units. The survey yielded information as follows:

- * Curriculum Revision. Thirty-nine states reported that the SDE assisted local schools in revision of curriculum as it pertained to NEM/AV.
- * Preparation of guides and other utilization aids. Thirty-

six states assisted local schools in the preparation of guides, study units, and resource units, which utilized NEM/AV information.

- * Preparation of bibliographies. Twenty-nine states prepared bibliographic materials for use by the local schools.
- Conferences and workshops. Forty-three states ordinarily conducted conferences and workshops for local schools related to NEM/AV matters. These constituted an estimated 12 per cent of the total workshop activity program of state departments of education. A total of 1,347 meetings was reported by 43 states, attended by a professional audience of 121,078 persons. Far and away the largest number of conferences and workshops was for teachers, but many of these were also attended by administrators and supervisors. A smaller number of meetings (about 350) was held especially for NEM/AV personnel. Lay audiences were also included in many of the meetings reported for professional groups; however, more than 100 special meetings were held for lay groups alone. In nearly 200 of the meetings mentioned above, school board members were also in attendance. Meetings varied in length from onehalf day to five or six days. The modal meeting length was one day. No attempt was made by the SAVES project staff to ascertain the number of meetings devoted to any particular phase of NEM/AV except for those related to teaching machines and programmed learning. effort was made to assess SDE conference activities in this area because of the prominence of programmed learning at the time of the study. Results showed that: (a) twentyone states reporting programmed learning activities sponsored a total of 291 workshops and conferences in this field in 1960-81. These meetings included demonstrations of machines and equipment, experiments in utilization, and talks, and (b) the number of such meetings in the 21 states ranged from 1 to 104; the average was 13.86. In addition to conferences and workshops on programmed learning, respondents in some of the 43 states reporting workshop activities indicated informally that they conducted meetings in such area. as the following: educational television (production and use), NEM/AV utilization in all curriculum areas, production of teachermade materials, and administration of NEM/AV services. New equipment, devices, and materials used singly or as cross-media were frequently the subject of in-service demonstrations.

Unique circumstances within some states led to variations in usual patterns for the conduct of meetings devoted to NEM/AV topics. The following are among those described by SDE respondents:

- * Closed-circuit ETV demonstrations for faculty meetings, or district meetings.
- * Mobile laboratories, fully equipped to demonstrate



methods and materials in science, mathematics, languages, and/or vocational subjects.

- * Telpak Communication System for statewide telephone conferences in science and other subjects.
- * NEM/AV demonstration kits and/or teams available on request.
- * Demonstration centers established to bring NEM/AV "know-how" close to the point of need.
- * A tailormade, packaged in-service kit. The SDE staff pre-plans and prepares several types of in-service programs. From a listing of these, schools select the one most appropriate to their needs. Some kits include only materials and equipment, others require SDE personnel, and still others include both.
- * Kits which included NEM/AV materials and equipment on how-to-teach distributed or circulated to teachers in remote areas.

Publications. Printed materials support and implement educational goals. In relation to NEM/AV programs they are useful in disseminating, among other things, information about new instructional materials, techniques and utilization practices, research findings, opportunities for improving existing educational programs through the new media, conference reports, and suggested standards and specifications for facilities.

All states were surveyed in the <u>SAVES Study</u> to determine the scope of their publication activities in the <u>NEM/AV</u> field and the relation of these activities to the publication of other more general materials by state departments of education. Results showed that 32 states issued a total of 180 publications 33 which

catalogs or listings; (2) 98 dealt exclusively with NEM/AV matters; and (3) 52 dealt partially with NEM/AV activities. Frequently mentioned in this last category of publications were newsletters



A source list of selected NEM/AV publications supplied to the SAVES project staff during the course of the field interviews is contained in Chapter VI of the 1960-61 study. The list includes publications on television, language laboratories, programmed instruction, handbooks for teachers and/or administrators on instructional materials utilization and NEM/AV center administration, reports of surveys and so on.

dealt in whole or in part with NEM/AV. These were roughly classified as: (1) catalogs and listings, (2) items dealing wholly with NEM/AV matters, and (3) items devoted in part to NEM/AV matters. Of the 180 publications 14 thus reported, (1) 30 were

In the field of teaching machines and programmed learning where a special effort was made to get specific information, 14 states (out of 21) reported a total of 50 publications.

from the state superintendent of schools office in which were contained NEM/AV articles, reprints, announcements, and news items.

Thirty-five states provided data pertaining to the number of general SDE publications for 1960-61. These totaled 2,121 items. The ratio of NEM/AV publications to general SDE publications was 180 to 2,121, or about 1 to 11.

On a national basis, NEM/AV publication activities constituted about nine per cent of the total publication activities within state departments of education. Typically, states issuing general publications were most often those that also issued publications related to NEM/AV.

The preparation of NEM/AV publications by the SDE in cooperation with statewide committees was a fairly common practice among states. According to respondents, the involvement of school personnel in this way proved an effective method of emphasizing the value of NEM/AV in the educational program, promoting innovations at the local level, fostering experimentation in pilot classroom situations, improving utilization practices, and developing NEM/AV leadership.

State Government Activity in ETV. In an effort to assess the role of state government and the SDE with respect to ETV, all states were asked in the SAVES mail questionnaire to indicate; (1) their legal responsibilities or administrative powers to establish and operate or to fulfill other responsibilities concerning open- or closed-circuit educational television within the state, and (2) whether any other agency of state government had such responsibility. ¹⁵ In later personal interviews, state

15 SAVES questionnaire, item 14, SAVES Report, Vol. II. Appendices, Appendix D, p. 15.

respondents were also asked to indicate whether leadership in the development of educational television stations or networks to serve public schools was shared by the SDE with one or more other agencies 16

16 SAVES Master Interview Schedule, SAVES Report, Vol. II, Appendices, Appendix D, p. 85.

Because of the diversity and complexity of state government organizational patterns and operating procedures, clearcut answers describing ETV activities were difficult to obtain. However, from data provided it was seen that:

- * State government (not necessarily the SDE) had some role in the development and sponsorship of educational TV in 36 states.
- * Twenty of these states reported that the SDE had some legal responsibility for educational TV.
- * In 15 of 36 states, a state agency other than the SDE had responsibility for ETV.



In those states in which the SDE carried the ETV responsibility, eight reported that the SDE operated either an open- or closed-circuit system; five states were required to supervise open-circuit ETV stations operated by some other state agency. Fifteen states reported the SDE represented the state government in official sponsorship or direction of open-circuit ETV stations.

In response to the interview question about the agency (or agencies) taking a leadership position in the development of educational TV stations and networks to serve the public schools, 17

17 SAVES Report, Vol. II, Appendix D, p. 85.

states reported the following: 18

18 SAVES Report, Vol. I, Chapter II, Table XV, p. 83.

- * SDE leadership -- 22 states
- * Other state agencies -- 15 states
- * Institutions of higher education -- 13 states
- * Local school units -- 5 states
- * Community groups -- 3 states
- * Commercial agencies -- 4 states
- * MPATI (Midwest Program on Airborne Television Instruction) -- 4 states

In some states, more than one group was credited with assuming leadership in ETV development. As a national pattern, the development of ETV within the states appears to be a responsibility shared by the SDE, other state agencies, and various local groups within the state.

In 1960-61, ETV activities were in various stages of development within the 36 states which indicated some role relative to educational television. To direct attention to ETV as a potentially important instructional tool, a few states began by sponsoring statewide conferences on the need for and values of educational television for school and community use. In California, for example, a conference was called for this purpose by the governor as early as 1952; in Illinois, the State Superintendent of Public Instruction and the North Central Association of Colleges and Secondary Schools had more recently sponsored a similar conference to consider the potential role of ETV in all aspects of education.

In some states, statewide committees were appointed to study problems relative to the orderly development of ETV. These committees generally served in an advisory capacity to either the SDE, the legislature, the governor, or some established TV authority or commission. Below are examples of activities of such committees:

* The Nebraska State Committee on Educational Television



studied the technical, legal, financial, and programming aspects of a statewide network.

- * In Colorado, the SDE appointed a Committee on Educational Television to consider ways and means of developing educational television for the entire state.
- * In Illinois, a sub-committee of the State School Problems Commission was appointed to study the educational television situation with a view to making recommendations for state policy and action.
- * In Rhode Island, the legislature created an Educational Advisory Committee to make recommendations to the State Board of Education on such matters as a statewide educational television service.
- * In Kansas, an education committee of the Legislative Council made a feasibility survey. The SDE cooperated in this study.

Where ETV activities within the states were more advanced ETV commissions or authorities appeared to be carrying major responsibility and authority for the development and operation of stations. Following are examples of this manner of functioning:

- * The Oklahoma Education Television Authority, independent of the SDE, was responsible for the construction, operation, and financing of ETV facilities.
- * In South Carolina, an Educational Television Commission was developed as a corporate body, independent of the SDE and supported by foundation funds and legislative appropriations. This Commission operated a statewide closed-circuit system and produced high school courses.
- * The Arkansas Educational Television Commission, also independent of the SDE, was responsible for the state government activities in television; also, it was charged with controlling and supervising use of all ETV channels.

SDE personnel, or designated NEM/AV personnel, were in nearly all cases members of or served as advisors to these commissions. In a few instances, state department of education personnel supervised ETV, approving ETV course content for school viewing and/or for credit. In one state, SDE personnel developed curriculum outlines for TV courses; these, in turn, were required to be approved by the state board of education before production as TV programs. SDE personnel frequently consulted with local school units on ETV production, programming, and utilization matters. In a very few states, they also assisted in evaluating school telecasts. In several states, the SDE encouraged or participated in ETV experimentation.

Coopérative arrangements in the production of ETV programs were noted in many states. These included working with personnel from local school districts, planning with institutions of higher education, and advising or contracting with commercial stations. New Mexico furnishes one example of a cooperative ETV undertaking. There, coordination of activities related to ETV at the state



level was, in 1960-61, the responsibility of the Director of Information and Television Services. He served as chairman of the Commission on Statewide Television for Educational Purposes: he also maintained close liaison with representatives of the local open-circuit ETV station (KNME) and with local school personnel responsible for implementing television utilization. KNME, owned by the University of New Mexico and the Albuquerque Public Schools, was operated jointly by the University, the Albuquerque Public Schools, and the New Mexico State Department of Education.

A sizable number of states provided financial assistance for ETV. This support generally took the form of special legislative appropriations for the ETV activity, including station operation, surveys, the conduct of experiments, and the purchase of ETV programs for distribution to stations. Some states also provided matching funds to school districts for ETV development; in one instance, schools meeting certain requirements were qualified for reimbursement on a per-teacher unit basis for classroom use of ETV courses.

Operational Services and Activities

The application of modern technology to education, resulting in the growth and expansion of NEM/AV programs, appears to require support activities and services of various kinds. Two of the most common support types (among the first to be developed in any program) are: (1) the procurement and distribution of materials, and (2) the production of certain NEM/AV items. Both activities require the services of technical and clerical staffs.

Relative to a survey question about SDE conference and workshop activities, all states were asked to enumerate the NEM/AV equipment and materials they owned for use in conferences and workshops. Replies from 47 states indicated that motion picture projectors were available in the largest numbers, followed, in order, by tape recorders, filmstrip projectors, and phonograph playbacks. States having the largest numbers of individual pieces of equipment also had the greatest variety of equipment available for conferences and workshop use. Sixteen millimeter films were the most widely available materials, followed by slides (2"x2" and 34"x4"), tapes, and filmstrips. Only 19 radios (in 11 states), 41 TV sets (in 17 states), 12 closed-circuit TV units (in 7 states), and 48 still cameras (in 18 states) were reported as owned and available for conference use.

States were asked as part of the SAVES survey, to indicate the nature and extent of their distribution and production services and activities. National patterns for these two activities were noted as follows:

Distribution of Materials. Forty-three states reported some kinds of NEM/AV distribution services. Three types of services were indicated: (a) to the SDE, (b) to the SDE and to schools for in-service use, and (c) general distribution to schools for local instructional use. Twenty-seven of 43 states reported materials were distributed only within the SDE. The other 16 states indi-



cated that their services were more generally available. In all, eleven states were shown to be providing a general materials distribution service to schools. Although the distribution survey was essentially concerned with the distribution of NEM/AV materials to schools, it was learned these services were in a few states available also to other public institutions. In Massachusetts, for example, public libraries and hospitals could subscribe to the film library service. In a very few states, lay groups could borrow materials on an informal basis from the NEM/AV unit.

Typically, a state film library serving public schools was found to be operated by a NEM/AV unit of the SDE. One exception to this practice, however, was the New Jersey film library which was operated by the New Jersey State Museum. As might have been expected, more states reported distribution of motion pictures than of any other media. 19 Tapes were found to be distributed

by 11 states, and filmstrips by 10. Magnetic tapes were listed as the most recently added item in the offerings of SDE distribution units, followed by 16mm motion pictures.

Production of NEM/AV Materials. Twenty-one states reported production of various types of materials for public school use. Slides were most commonly produced, followed closely by 16mm sound films, tapes, overhead transparencies, radio broadcasts, and television programs (including video tapes). Respondents in several states indicated that they advised on production problems with other units in the SDE and with other departments of state Two states reported that film production was a joint venture with some other unit. In Connecticut, for example, the SDE joined with five other states to produce a motion picture on library services. In Iowa, the department cooperated with the State University of Iowa in the production of two motion pictures (1961); they also cooperated with state institutions of higher learning in the production of 120 kinescopes of the Iowa TV Schooltime telecasts. (These kinescopes were later made available as motion picture prints from the college and university audiovisual centers.)

In a number of states, the SDE consulted with commercial concerns on the production of educational films and other media. In California, for example, the State Curriculum Commission, the Bureau of Audio-Visual and School Library Education, and the state NEM/AV association comperated with a commercial producer in planning and developing a series of films related to a newly adopted state textbook series. These films were subsequently adopted by the Curriculum Commission for use as supplemental materials.

In a small number of states, the MEM/AV unit also assumed responsibility for providing a graphic artist and/or a photographer to consult with or to produce materials (in limited quantities) for other state department of education personnel. Twenty-nine states



The kinds and quantities of materials distributed and those contemplated for future distribution are reported in Table XIV, SAVES Report, Vol. I, Chapter II, pp. 77 and 79.

produced no materials at all in 1961. Twenty-one of these had never produced materials for school use; four had produced materials in the past but were not doing so in 1960-61. Reasons given for this lack of production activity included lack of personnel, funds, and recent changes of policy.

Research and Development Activities

The SAVES Questionnaire and follow-up interview limited questions on research to: (1) the collection of statistics relating to the use of new educational media in the public elementary and secondary schools--"through annual reports from school districts, general surveys, and special studies."20 and (2) the

20 SAVES Report, Vol. II, Appendices, Appendix D, p. 11.

types of services available to the SDE for official studies related to new educational media. 21 Official studies were those

21 Ibid. pp. 76 and 77.

which a department could request from an agency or which the SDE could contract for. The study did not seek descriptions of developmental research activities—specifically the kinds of research that are an intrinsic and continuous part of planning, developing, and evaluating instructional programs.

Results of the survey showed that:

- * On a national basis, in half the states, statistical and research facilities were available. In 20 of the 25 states, the SDE research unit was also available for NEM/AV research, but only 11 states reported that it had been utilized for such purposes. Fifteen of the 25 states reported that agencies outside the state government could be used by the SDE. These included institutions of higher education, private and commercial agencies, and regional, county, or local school districts. State institutions of higher education appeared to be the second-most-likely research agency to be used by the SDE.
- * Nine states reported that more than one research agency had been utilized to conduct NEM/AV research activities. Eight states reported having used institutions of higher education; three states, private commercial or non-profit agencies; four states, regional, county or local district research facilities; and four states, unspecified research agencies.

Regulatory Activities

State responsibility for the quality of education is partly discharged through regulatory controls exercised by state departments of education. Although these controls vary considerably from state to state, they are generally designed to establish a "floor" for local educational programs. These controls pertain to such



matters as compulsory school attendance, safe and healthful facilities, financial accounting systems, 22 accreditation requirements,

instructional content and materials, and certification of educational personnel. In application and enforcement, it is possible to measure some standards objectively; but many depend upon subjective and informal judgments.

The States Audiovisual Education Study identified the following SDE regulatory functions relative to the use of NEM/AV in instructional programs in public elementary and secondary schools: (1) accreditation, (2) certification requirements, (3) building and facility standards, (4) NEM/AV equipment standards, and (5) distribution of state aid funds for NEM/AV activities. Findings of this part of the SAVES Study may be summarized as follows:

Accreditation. States were surveyed to determine: (a) which had published accreditation standards, and (b) which, of these, included reference to NEM/AV matters. Responses from 44 states showed that the SDE had published standards. From information obtained, it was impossible to determine accurately the exact nature of these requirements because the concept of "accreditation" and "approval" and the conditions under which the terms were applied varied widely in interpretation. Likewise, an effort to determine whether published standards were mandatory or recommended was unsuccessful.

Of the 44 states reporting SDE-developed and published accreditation standards, 32 had standards which referred to items related to NEM/AV, such as, minimum experience for teachers, minimum equipment and materials, and minimum physical facilities. Minimum experience for teachers was specified in published accreditation standards in not more than ten states. Minimum quantities of equipment and materials and/or minimum physical facilities were specified in not more than 11 states.

Examination of these standards revealed that references to NEM/AV provisions were of a general nature. Standards for facilities usually called for "adequate" classrooms, preview rooms and storage space; standards for materials were characterized by expressions such as "up-to-date", "a wide variety" and "evidence of effective use". Where these were specific they covered only the more conventional items such as blackboards, blinds, (not audiovisual dark-out blinds) maps, and globes. A small number of states reported that for accreditation purposes schools were required to spend minimum amounts of money annually for instructional materials. Amounts specified were in some instances a total sum for the school, in other cases, a per pupil expenditure. For example, in Mississippi, schools with an A or AA rating were required to show a minimum expenditure of \$200-\$350 per school for NEM/AV materials and membership in a film library. In Indiana, schools were required to spend annually from \$1.25 to \$3.75 (the



²² Fred F. Beach and Andrew H. Gibbs. The Personnel of State Departments of Education, Misc. No. 16, U. S. Office of Education, Washington, D. C., 1952.

exact amount depended upon a number of factors) per pupil for instructional materials exclusive of textbooks and NEM/AV equipment.

Standards recommended for personnel having NEM/AV duties were reported for two states, Oklahoma and Illinois. In the former, a building coordinator with sufficient time for coordinating NEM/AV services was recommended for each school building. In Illinois, standards were more inclusive. In addition to recommending district and building coordinators, this state also recommended that personnel with NEM/AV duties be acquainted with the total educational program of the district, that they have time to perform their duties and that they consult with teachers on the selection, use, and distribution of materials and equipment.

Certification Requirements. All states were requested to indicate the nature of NEM/AV requirements contained in certification regulations for teachers, administrators, supervisors, and librarians. Variations in certification procedures made precise reporting of this information difficult. Furthermore, overlappings in requirements²³ made it necessary to analyze the basic documents

It would appear that, on the basis of specified certification requirements alone (1960-61), NEM/AV training in the 50 states was not a widely applied criterion in NEM/AV assignment. Thowever,

ERIC Full fact Provided by ERIC

For example, the same state which required NEM/AV training for teachers may also have required it for administrative and supervisory personnel and/or librarians. SAVES Report, Vol. I, Chapter II, pp. 38 and 39.

as a check on the questionnaire responses. This analysis revealed that a total of 13 states had NEM/AV certification requirements for school personnel (37 states had no certification requirements) in the following classifications:

^{*} Librarians -- 5 states. In a few states, (Florida, for example) the school library was conceived as an Instructional Materials Center and the librarian in charge was required to have NEM/AV course work.

^{*} Teachers -- 6 states.

Administrators and supervisors -- 10 states. Five of these ten also required basic NEM/AV training for teachers. Requirements were generally specified as course work in audiovisual education, the number of semester hours varying among the states for different types of certificates or credentials. For example: AV supervisors in Kentucky, Ohio, and Maryland were required to have 6, 12, and 20 semester hours respectively. For designated AV Coordinators or AV Directors in Illinois and Minnesota, course work in the audiovisual field varied from 10 to 20 semester hours depending on the nature of the special certificate. Connecticut was unique in that directors of NEM/AV centers and/or specialists in media production and use were required to have a master of science degree in audiovisual administration.

absence of such requirements within a state did not always signify that need for AV training was completely disregarded. Often, in various states, other kinds of recommendations did give attention to the need for NEM/AV training or experience, as shown in the following selected examples:

- * In Connecticut, AV courses were included in blocks of courses required for the teaching credential. Selection of the course was optional. Audiovisual methods were generally built into regular methods courses for subject matter areas for the secondary teaching credential.
- * In Florida and Louisiana, the state department of education recommended that teacher education institutions require NEM/AV training for teacher candidates. In practice (according to the respondents) these recommendations were usually followed.
- * Although certification requirements in Colorado did not require NEM/AV courses, accreditation standards required that, to be qualified as NEM/AV directors and coordinators, individual; must have a minimum of three semester-hours in "Organization and Administration of Audic-Visual Materials."

Building and Facilities Standards. To determine the role of the SDE in the development and application of building and facilities standards related to new educational media, states were asked about: (a) published standards which referred to NEM/AV uses, (b) whether these standards were mandatory or recommended, (c) how adequate they were, and (d) the extent of consultation by SDE personnel having NEM/AV responsibilities with the school plant planning section. Responses provided the following information:

Published school standards. Twenty-seven states reported they had published standards for school buildings and facilities which contained references to classroom uses of NEM/AV. In 19 of these, references were specific to NEM/AV; in the others, standards were reported to be the more or less conventional building code requirements. standards were provided in various ways: (examples) through planning guides for instructional materials centers (in Florida); through a general NEM/AV handbook (in Illinois) which recommended minimum facilities; and through a special bulletin on language laboratories (in Vermont) containing specifications for acceptable facilities. Such bulletins were usually prepared by NEM/AV and other professional personnel. In Michigan, on the other hand, a series of bulletins on facilities and equipment were prepared by a statewide lay and professional committee appointed by the state superintendent

Twenty-three states reported no published standards related to building regulations. In many instances it was emphasized that, as a normal standard for all class-rooms, the following items were covered: minimum power supply (seven states), ventilation (seven states), light



control (five states), and minimum storage space (five states). A few states without published standards prepared special bulletins similar to those published by the Bureau of School Building Services of the New Jersey State Department of Education. These dealt with individual instructional areas in schools and suggested designs to facilitate instruction in selected subject areas. New media facilities were emphasized.

Although the California SDE was found to have no general school plant standards related directly to NEM/AV facilities, school districts were, under certain conditions, determined to be eligible for special state construction aid. Such schools were required to include specified NEM/AV facilities as determined by the rules and regulations of the Department of Finance Allocation Board. Recommended facilities standards were developed cooperatively by the SDE NEM/AV unit and the Audio-Visual Education Association of California.

- * Mandatory or recommended standards. In six states, standards were mandatory for elementary schools; in seven, they were mandatory for secondary schools. Eighteen states reported that such standards were only "recommended" for secondary schools.
- * Adequacy of standards. Respondents in slightly more than half the states (27) expressed the general opinion that facilities regulations were adequate in the following categories: (a) classroom electrical power supplies, (b) classroom electrical outlets, (c) ventilation control, and (d) classroom light control. It was also their opinion that additional regulations were needed to cover (a) conduits for radio and television, (b) storage space, and (c) graphics production space.
- * Consultation with school plant planning section. Six states had a specialist in NEM/AV requirements within the SDE school plant planning section. In 33 states, school plant planning personnel consulted with personnel assigned NEM/AV responsibilities.

MEM/AV equipment standards. States were surveyed by the SAVES staff to determine the extent to which state departments of education published standards for NEM/AV equipment. Analysis of responses indicated that there was a general lack of uniform interpretation or understanding of the meaning of standards among SDE personnel. Standards varied considerably in scope and specificity and there was wide diversity in their types and application within individual states. However, from the information obtained, survey findings indicated that nationally:

* Twenty-eight states had published standards concerning specifications for NEM/AV equipment; 22 had²⁴ no such standards.



Three of these anticipated developing such standards before July 1963.

- * Twenty-five of the 28 states reported that published equipment standards were developed primarily in relation to NDEA. Although responses did not differentiate uniformly between equipment standards and NDEA purchase requirements, the impact of NDEA upon development of standards was clearly present in at least half the states.
- * Equipment standards, in a few states (in addition to NDEA requirements), were also recommended in publications; for instance, in school planning guides in Minnesota, and in an administrative handbook in Missouri.

Distribution of State Aid Funds for NEM/AV Activities—Ear-marked and Non-earmarked. Funds earmarked Specifically for NEM/AV activities were found in the SAVES Study to be distributed to local schools in 27 states. In 21 of these states, funds were allocated as a new or special type of financial support. Five states reported that such fund distribution was a regular part of the state's school support program.

of the 21 states indicating that allocated funds were a new and special type of financial support, 19 reported that such funds were exclusively related to NDEA programs. (The effect of NDEA upon spending patterns is obviously apparent in this analysis.) The basis or manner of distributing earmarked funds (other than NDEA funds) provided a number of interesting variations:

- * In Tennessee, earmarked funds were ellocated on the basis of per pupil of average daily attendance--\$1.25 per pupil for "instructional materials other than textbooks." But these funds could also be used for "maintenance and operation of the school plant." In Florida, \$25 per teacher unit per year was allocated for library and audiovisual materials, exclusive of monies supporting educational television,
- * In Georgia, several state school support funds were specifically marked for NEM/AV purposes. Audiovisual matching funds were used to establish local film centers, and, in amounts up to \$1,000, to finance the purchase of NEM/AV materials by local school districts. An additional sum of \$75,000 could be allocated from state library funds for NEM/AV purposes. Districts receiving such funds were required to match them from local monies.
- * In California (1960-61), the State Superintendent of Public Instruction was permitted by law to provide up to 50 per cent of the costs of county audiovisual services. California's 58 counties provided such services for local schools; during 1960-61, the California SDE allocated nearly 2 million dollars for direct support of county audiovisual service centers.
- * In New Jersey, earmarked funds in amounts up to \$2,500 were available on a matching basis to each county NEM/AV center. In 1960-61, approximately \$50,000 of state aid funds were distributed to 20 centers in this manner.

Non-earmarked state funds were distributed by 43 (of 50)



states. With local board approval, such funds could be used for NEM/AV purposes.

Groups Other Than SDE Providing Leadership in Areas Related to NEM/AV. Education today is a cooperative enterprise. Governmental agencies, institutions, national and local school, lay, and business groups commonly work together to establish standards, conduct research, prepare publications, and develop new methods and materials for classroom use. In such cooperative undertakings, leadership is seen not to be vested in one individual, one group, or one agency; rather, it is assumed by many groups or individuals. Such is the situation in the NEM/AV field, where leadership in the development and advancement of NEM/AV activities and programs continues to be a joint undertaking.

The SAVES Project sought information through personal interviews about groups or agencies, other than the SDE, which were assuming or providing leadership in the promotion of NEM/AV cartification requirements, accreditation, NEM/AV equipment specifications, publications, research, and educational television. Although every state was questioned about these matters, some did not respond. Answers reported (representing opinions of SDE interview respondents) showed that in the promotion and development of NEM/AV standards for certification, accreditation, and equipment and in the publication of NEM/AV materials, the most consistent support, aside from the SDE, came from NEM/AV associations. Leadership was also provided by institutions of higher education, library associations, and educational organizations other than the NEM/AV group. In a few instances commercial groups and lay groups shared these leadership responsibilities.

In 24 states, institutions of higher education appeared to be assuming the major leadership role. In these states, no SDE research activities were reported.

In 36 states which identified the SDE with ETV responsibilities, respondents indicated that, in addition to other state agencies, this leadership was shared with institutions of higher education and various local and community groups.

Interests and Attitudes Toward New Educational Media

On the assumption that the interests and attitudes of teachers and administrators (including supervisors) might possibly be the controlling factor in acceptance and use of new instructional materials, the <u>SAVES Study</u> sought to assess interests and attitudes of these individuals regarding currently prominent (1960) new educational media. These assessments were based on a canvass of opinions and observations of SDE interview respondents. Results were as follows:

* Teaching machines. Interest in teaching machines was rated "very high" or "moderately high" for administrators and supervisors in 38 (out of 50) states; teacher interest was similarly rated in only a little more than half of these same states (27). Low interest in teaching machines was reported in more than twice ___ many states



for teachers as for administrators (23 states vs. 11).

Administrators showed a positive attitude toward uses of programmed learning and teaching machines in more than twice as many states as teachers (30 states to 14). In 35 states teachers showed a neutral or negative attitude toward use of this tool; the same administrator rating was made in 20 states.

- * Language laboratories. Teacher and administrator interest in language laboratories was "very high" or "moderately high" in 48 of the 50 states. Attitudes of both groups toward the use of language laboratories in teaching were reported to be favorable in 44 states for teachers and in 45 states for administrators.
- * Overhead projection. Both teachers and administrators in the majority of states were reported to be interested in overhead projection. Forty states reported "very high" or "moderately high" teacher interest in overhead projection; 39 states reported similar interest among administrators. Attitudes toward uses of overhead projection were favorable in 40 states for teachers and in 43 for administrators. Neutral or negative attitudes were reported in the remaining states.
- * Eight-millimeter sound motion pictures. Low interest in 8mm film appeared to prevail in 45 states for teachers and in 46 states for administrators. A more or less neutral attitude toward their use appeared to be a characteristic pattern for administrators in 38 states and for teachers in 36. This attitude was interpreted by interview respondents as generally one of "wait and see".
- * Educational television. Interest in educational television was also reported as "very high" or "moderately high" for teachers in 43 states and for administrators in 48. Attitudes toward use of ETV were reported favorable for teachers in 35 states and in 41 for administrators. "Very high" interest (the highest rating) and "very positive" attitudes (the highest rating) were reported more often for administrators than for teachers.

In summary, and on the basis of estimates of interest in and attitudes toward new media, it would appear that, the 1960-61 administrator-supervisor group was more favorably disposed toward all new educational media than the teacher group. Of all the currently prominent new media, language laboratories were the most widely accepted. ETV and overhead projection were in second and third positions in the high-interest and favorable-attitude categories. Low interest and a neutral or negative attitude toward their use were judged to exist for teaching machines and 8mm sound motion pictures.



Chapter 3

NEM/AV DEVELOPMENT--PAST AND FUTURE OPINIONS OF RESPONDENTS

One important phase of the <u>SAVES Project</u> involved obtaining opinions and observations of <u>SDE personnel</u> covering (1) growth trends in <u>NEM/AV</u> programs for the 15-year period prior to 1960-61, (2) changes expected in the next ten years, and (3) the major needs within each state for the adequate and orderly development of <u>NEM/AV</u> use in the public schools. These opinions and observations represented the thinking of more than eighty educators, some of whom were <u>NEM/AV</u> specialists, but many of whom spoke from a more general frame of reference. Their judgments may be useful to chief state school officers and others in the <u>NEM/AV</u> field as they view the present situation and plan future <u>NEM/AV</u> activities and services.

In this chapter the opinions expressed by these individuals are summarized under three general headings:

- * Growth Trends in NEM/AV in the Fifteen Years Prior to 1960-61
- * MEM/AV Developments Expected to Occur in the Next Ten Years
- * Principal Needs for the Growth and Improvement of NEM/AV Programs

Growth Trends in NEM/AV in the Fifteen Years Prior to 1960-61

During the personal interviews with members of the <u>SAVES</u>
<u>Project</u> staff, respondents were asked to review some of the <u>Changesl</u> that had taken place in the 15 years prior to 1960-61

SAVES Report, Vol. II, Appendices, Appendix D, p. 94.

or since World War II.

Observations and opinions of SDE personnel were canvassed about increases or decreases in (1) materials distribution centers, (2) local graphic materials production units, (3) the number of persons employed in NEM/AV, and (4) the amount of money spent for NEM/AV by local school units. No attempt was made to support these observations by a statistical analysis of records since this was not considered to be within the scope of the study. The following results are reported:

Materials Distribution Centers. Materials distribution centers were judged to have experienced growth in 45 of the 50 states. The majority of these states (29) characterized the growth as "slow" within their states while 16 states believed it to be "rapid".

Respondents in 44 states reported (on the basis of another interview question2) that their state departments of education



SAVES Report, Vol. I, Chapter II, p. 88.

encouraged the development of distribution centers on a regional or local basis. However, respondents in 30 of these 44 states also contended that central distribution by the SDE should be carried out in certain specialized NEM/AV areas. Many of these same states advanced the further idea that distribution of critical, high-cost materials should be centralized within the SDE or at the state level, and that local distribution centers should handle frequently-used and specialized materials near the point of use, 3

3 Ibid.

Local Graphic Materials Production Units. Within the last 15 years, growth in local graphic materials production units has taken place (according to SDE personnel) in 28 states. In three-fourths (21) of these states, growth was characterized as "slow"; it was identified as "rapid" in the other seven. There appeared to have been no notable recent change in the growth of local graphic materials production units in 20 states. Thirty-three states reported that they encouraged the development of local graphic materials production facilities on a regional basis. In 35 states, the SDE encouraged cooperative arrangements between existing local and regional production units to supply such materials to local schools.4

4<u>Ibid.</u>, p. 90.

Numbers of Persons Employed in NEM/AV. Forty states reported growth, in the 15 years previous to 1960-51, in the number of persons devoting full-time to NEM/AV activities. But in little over three-fourths (32) of these states this growth was characterized as "slow". Only 8 states indicated growth as "rapid". SDE personnel in ten states (of 50) declared there had been no notable change in the number of persons thus employed during this same period. All but three states (or 47 states in all) however, experienced increases in numbers of part-time personnel employed in NEM/AV. For 35 of the 47 states, the growth pattern was "slow"; in 12 it was characterized as "rapid".

Money Spent for NEM/AV by Local School Units. In the judgment of respondents, local school units in 47 of the 50 states had recently increased expenditures for NEM/AV materials and equipment. Such expenditures did not include National Defense Education Act funds which were seen to have had their own significant effect on spending patterns for NEM/AV activities and resources. Amounts spent were judged to have increased "slowly" in 36 of the 47 states; ll others had experienced "rapid" growth.

In summary, appraisals (by SDE personnel) of NEM/AV growth trends in the 50 states showed that nationally there had been growth in the number of materials distribution centers (45 states);



in the number of local graphic materials production units (28 states); in the number of full-time personnel employed in NEM/AV activities (40 states); in the number of part-time personnel thus employed (47 states); and in the amount of money--not including NDEA funds--expended for NEM/AV services (47 states).

Growth was seen to be <u>rapid</u> for materials distribution centers in 16 states; for production centers in 7 states. Rapid growth was identified with employment of full-time NEM/AV personnel in 8 states, and with part-time personnel in 12 states. In 11 states only was an increase in the amount of money expended for NEM/AV by local school units judged to be rapid.

The growth was thought to be slow more often than rapid in

5States not included in this tabulation reported "no noticeable change". SAVES Report, Vol. I, Chapter II, pp. 104-108.

all of the above categories as the following tabulation showed: materials distribution centers - 29 of the 45 states reported growth to be slow; local production units - 21 of 28 states; number of full-time personnel - 32 of 40 states; and money spent by local schools - 36 of 47 states so reported.

As observed by SDE personnel in 1960-61, national patterns of NEM/AV growth within states in the four categories studied were seen to be increasing for the 15-year period previous to 1960-61 but the rate of growth was generally characterized as "slow".

NEM/AV Developments Expected to Occur in the Next Ten Years

Data for this portion of the study were derived from taperecordings made during personal interviews with state respondents conducted by the SAVES field interviewers. All respondents were asked five identical questions, in the same sequence. They were

SAVES Project interviewers were briefed during a five-day work-shop on standard interview techniques, using mock-interview techniques. After each member had conducted one actual state interview, the interview team met to compare experiences and to determine ways to improve subsequent interviews.

encouraged to express personal viewpoints about these questions and to base their remarks on their observations and experience. Replies to four of five questions used are reported here; data from the fifth question are discussed in the last section of this chapter. These four questions focused on changes expected nationally (1) in NEM/AV materials and devices, (2) in the development of materials distribution and production centers, (3) in numbers of persons likely to be engaged in NEM/AV activities and in requirements for NEM/AV positions, and (4) in NEM/AV financing and expenditure patterns. With the exception of the question on expected changes in NEM/AV materials and devices, these questions called for the projection of opinions on the same items used in the discussion of growth trends prior to 1960-61. Results of



this questionnaire (1960-61) are summarized below:

Taped responses to each question were analyzed separately, then grouped for similarity of ideas. A frequency tabulation was then made of the number of times a similar response occurred. No attempt was made to relate remarks or opinions to any one state.

Changes Expected in NEM/AV Materials and Devices. As might have been anticipated, NEM/AV materials and devices were expected to increase not only in numbers available but in types of equipment and variety of media to be utilized. Considerable utilization expansion was anticipated for teaching machines, overhead projectors, 8mm sound film, and educational television. Among the more conventional devices, increased availability and use of tape recorders, microprojectors, and filmstrip projectors were predicted. A further prediction was that, as a result of more experimentation and applications of recent technical knowledge, materials and devices would improve in quality. Equipment would be "lighter", "more compact", "more versatile", "simpler and easier to use". A number of respondents also anticipated major modifications in traditional classroom learning situations which would affect staffing patterns and school organization. A few respondents indicated concern that many devices would be developed that would fall into disuse after a trial period.

Changes Expected in Distribution and Production Centers. Although NEM/AV distribution centers generally were predicted to increase, respondents varied greatly in the predictions as to where such centers would be located. Most frequently mentioned for future development were county or regional centers; state centers were next—with or without supporting regional units. The prediction was frequently expressed that most local districts and individual schools would eventually need NEM/AV centers as increased quantities of instructional materials and equipment became available. It was also expected that the nature of these centers would change and that they would become resource centers to provide a full range of curricular services and instructional materials.

There was general agreement among respondents that local production centers would increase in numbers and that the quality of locally produced materials would improve substantially as more educators became involved with them. Most respondents predicted that production centers would be developed on a regional basis and that, in some instances, they might even serve more than one state.

Changes Expected in Numbers of Persons Engaged in NEM/AV
Activities and in Requirements for NEM/AV Positions. In the
judgment of most respondents, more NEM/AV positions would be
created in the future, thus requiring additional professional and
non-professional personnel. Such increases in professional NEM/AV
personnel were believed likely to occur at local, regional, state,
and national levels. A few respondents expected an increase in
the number of national consultants in the NEM/AV field. Greatest



personnel increases were anticipated for building coordinators, clerical and technical personnel, ETV production staffs, staffs for developing programmed materials, and resource personnel for industrial and community educational activities. Several respondents noted that increases in NEM/AV personnel for schools would depend in large measure upon whether or not NEM/AV materials and devices were used integrally in teaching-learning activities, as they should be, or merely as supplementary enrichment. There appeared to be general agreement among respondents that more and better training of educational media generalists and specialists would be necessary; similar needs were seen for the in-service and pre-service development of classroom teachers.

Changes Expected in Financing and Expenditure Patterns. the majority of respondents it was obvious that expected expansions of NEM/AV programs would require greater expenditures of funds. Such expenditures would be especially necessary to support increased numbers of professional personnel, construction of new and better physical facilities in which to use new media, and the broadening and strengthening of in-service and pre-service educational programs. It was expected that funds for such purposes would come from all levels of government--local, state, and Only a very few persons judged that there would be little change in NEM/AV expenditure and financing patterns over the coming ten-year period. There was a general lack of agreement as to the sources of future revenues for NEM/AV activities. expected state and national, rather than local, governments to provide more financial aid. (By this time, national funds through NDEA had already improved conditions in the NEM/AV field.) A few respondents observed that the tax structure would need to be revised before new funds from local and state levels could be expected. These individuals hoped that such new tax revenues would be part of regular school budgets, rather than being treated as "earmarked" funds.

Principal Needs for the Growth and Improvement of NEM/AV Programs

State respondents were asked a final question, "What do you see as the three greatest needs of your state in the new educational media field?" Their tape-recorded answers were processed in the same manner8 as those for the four questions discussed in

Judged by their frequency of mention, the three needs uppermost in the minds of respondents were for: (1) teachers well-trained in NEM/AV utilization; (2) NEM/AV leaders well-trained for responsibilities at the local, intermediate, and state levels; and (3) more adequate financial support. In various ways, respondents indicated that more and better in-service and pre-service training would be required for teachers, administrators, NEM/AV personnel, and teacher educators, as well as for lay board members.



⁸ See footnote 7,

the preceding section of this chapter. A summary of these opinions follows.

A few respondents thought competence could be improved primarily through certification requirements.

High on the list of requirements was the need to re-examine the school curriculum and current methods of teaching in the light of the availability of new media resources. It was thought that such re-examination would lead eventually to improved facilities and to necessary administrative reorganizations of schools and changes in ways of using the teaching staff. Among other frequently mentioned items were the following:

- * Need for improved NEM/AV materials and devices.
- * Need for local and regional distribution and production centers—to make materials and devices more readily available and more accessible to eventual users.
- * Need to understand the proper role of ETV in education and to explore and develop its uses in teaching-learning.
- * Need for NEM/AV research, more application of valid research findings already known, and more "grass roots", "practical", and "action-type" research at the local school level.
- * Need to inform public and professional groups about the potentialities of NEM/AV materials and devices.
- * Need for better cooperation and coordination among persons, agencies, and institutions in relation to NEM/AV matters.

Chapter 4

RECENT INFORMATION ON STATE NEM/AV PROGRAMS

Although the original central purpose of the <u>Summary Report</u> was to summarize only the significant findings of the 1960-61 <u>SAVES Study</u> and the <u>Connelly Study</u> of state laws on <u>NEM/AV</u> media. It soon became apparent that inclusion of more recent data concerning various state programs also would be required. A plan to obtain data for this alteration of purpose was supported by the Association of Chief State School Audio-Visual Officers. Information that follows, derived from questionnaires and interviews, will be discussed under several categories:

- * Descriptive Reports of Five States--Updated. NEM/AV activities of five states selected from the 50 described in the SAVES Report (Volume I, Chapter III) will be reported for both 1960-61 and 1964-65. Interim changes will be indicated.
- * Updated Information Obtained from the ACSSAVO Questionnaire. Data for 1964-65, obtained from the questionnaire circulated by ACSSAVO, will be presented graphically, along with comparative 1960-61 information for the same questionnaire items.
- * Significant Changes Since 1960-61. This section will report in summary form the important NEM/AV recent changes and developments identified by respondents from 38 of 50 states. All these changes were described as having occurred since completion of the original SAVES questionnaire.
- * Influence of the NDEA upon SDE NEM/AV Programs.

Comments on NEM/AV Programs in Five States

The five states chosen for detailed description and analysis in the materials that follow have several points in common:

- * Each has a functioning NEM/AV administrative unit within the SDE and/or designated NEM/AV personnel.
- * Each has a well-defined NEM/AV program under professional leadership.
- * Each has an identifiable budget for NEM/AV activities and services.
- * Each has developed statewide plans for uses of ETV in the public schools.
- * Each provides professional assistance to SDE staff members on NEM/AV matters. It also furnished audiovisual materials and equipment for their use.
- * Each provides a statewide program of leadership in developing county or regional and local district NEM/AV programs calculated to make available to classroom teachers a wide range of NEM/AV services.



Each of the states is seen to follow a somewhat different approach to providing NEM/AV services and under varying circumstances of support and control. Several characteristic factors may be identified for each. In California, for example, the Bureau of Audio-Visual and School Library Education operates with a relatively small professional staff, of whom all are primarily generalists in the NEM/AV and school library fields. With NDEA financing, the Bureau also employs a well-qualified, part-time staff of specialists who live and work in other parts of the Responsibility for school libraries was assigned to the Bureau in 1960. Since the Bureau began (in 1945), its basic policy has been that of encouraging continuous decentralization of NEM/AV services at county, district, and individual school levels. The California SDE allocates state educational funds to county NEM/AV service centers through use of a district matching formula. The SDE itself has no separate legal authority except that delegated to it by the California State Legislature.

Connecticut, somewhat in contrast, provides an SDE NEM/AV program that works directly with school districts; this state has no intermediate county school units. The Connecticut SDE itself has broad legal powers with which to direct the state educational Despite the traditional independence of local governprogram. mental units of the region, the SDE is seen to be instrumental in providing essential leadership for educational innovation. The Consultant in Audio-Visual Education and Educational Television has been instrumental, here, in developing cooperative activities with other SDE staff members, local school districts, institutions of higher education, professional associations, and commercial groups. In a few instances, this cooperation has extended also to neighboring states. A major focus of the Connecticut NEM/AV program has been to assist local schools in developing closed-circuit RTV and to stimulate classroom use of telecasts. Film utilization has been facilitated through publications of annotated film listings for various subject matter areas and distributed to all teachers of those subjects in the state. Published standards for equipment, materials and building facilities, as well as high qualifications for NEM/AV personnel, have been developed and disseminated through state level leadership activities.

In Hawaii, youngest of the states, the SDE has been occupied in guiding the state's educational system through territorial status to statehood. There the SDE administers the entire state educational system somewhat in the manner of a single large school district. The NEM/AV program, of quite recent origin, developed rapidly but in orderly fashion. In an effort to benefit to some extent from the experiences of others, the SDE obtained the services of a survey team whose recommendations recognized existing conditions peculiar to the state. Hawaii represents an example of NEM/AV services functioning in the context of a Library Services Division, as contrasted with California where the school library program functions in a bureau long established as "audiovisual".

In New York, the SDE has been given sweeping constitutional powers for directing education within the state. The Division of



Educational Communications has recently been reorganized to coordinate NEM/AV activities and services that, in many instances,
had become much too diffused for effective administration. This
large and complex division is now administered in such a way as
to provide a wide range of integrated specialized services for
the SDE staff and other schools of the state. The division itself
is experimentally oriented to develop, field-test, and evaluate
the worth of educational innovations.

Pennsylvania has the distinction of being the first state to have an SDE NEM/AV program. Leadership at the state level is centralized in the Bureau of Instructional Materials and Mass Media, which operates with a large staff of specialists in several NEM/AV fields. In-service functions, publication, production and distribution services are important activities. Decentralization is sought through the operation of regional centers closely coordinated with the state NEM/AV program. Television, in Pennsylvania, receives major emphasis and permeates the educational structure of the state. The state also makes effective use of many community resources such as museums.

Information in the following pages deals with further details of NEM/AV programs of these five states. Data for these descriptions have been drawn principally from three sources: (1) the original SAVES Study (1960-61), (2) personal interviews with state NEM/AV officials conducted by members of the Summary Report staff during 1965, and (3) mail questionnaires circulated by the ACSSAVO secretariat to members of that organization.

Each of the reports following was reviewed and approved by the appropriate chief state school audiovisual officer before inclusion here.

CALIFORNIA

NEM/AV Organization and Finance

1960-61. The California Bureau of Audio-Visual and School Library Education, since its inception, has functioned as a separate administrative unit of the Supplementary Education Services Section of the Division of Instruction. It was this unit that bore the primary responsibility for SDE activities in NEM/AV matters.

The Bureau has five professional full-time members, each with some specialization of function to be rendered throughout the entire state. Eight other SDE staff members also assisted in phases of the NEM/AV program as these related to their professional assignments. Sixteen part-time consultants--NEM/AV specialists from institutions of higher education and city and county school districts--were used for approximately 90 meetings, each, one to three days long.

All professional, technical, and clerical personnel for the California Bureau were selected by state civil service procedures.



Competitive written and oral examinations were held for all positions. Civil service examinations for professional NEM/AV personnel required the applicant to have a comprehensive knowledge of education and specialized knowledge and understanding of NEM/AV education as it related to the position in question. The examination also tested the individual's ability to apply his knowledge to state level NEM/AV problems. For the Bureau chief's position, a master's degree and four years of experience in the administration of an NEM/AV unit at the district or county level w("? minimal requirements for service and eligibility. In practice, however, the chief was required to hold a doctorate degree. Two years of NEM/AV administrative experience were required for a consultant's position.

The budget for the NEM/AV Bureau during fiscal year 1961 included \$81,104 for salaries, \$10,053 for travel, \$7,500 for publications, and \$9,940 for NEM/AV materials and other expenses; the total budget of \$108,597 for 1961 was a separate, identifiable part of the SDE budget.

1964-65. The organization of the California Bureau of Audio-Visual and School Library Education remains basically the same today as it was in 1960-61. A Bureau chief and consultants still provide essential specialized services in both audiovisual and school library education. The Bureau staff now includes six professional members who, for years, have worked closely with other SDE members so that many of the latter are now qualified to assist local school personnel regarding NEM/AV needs related to their own specialized fields. The Bureau chief reports that through NDEA, it is now possible to provide expanded services to the state's rapidly growing school population. Largely with NDEA financial assistance the Bureau also has selected 44 NEM/AV consultants with NEM/AV specialization and assigned them (part-time), as needed, to consult in different parts of the state.

Under Title II of the Elementary and Secondary Education Act of 1965 the Bureau will add four additional consultants, two of whom will devote their time to school library work. One will be an ETV specialist; one will be a generalist in NEM/AV.

The Bureau's budget for fiscal year 1964-65 included \$124,000 for salaries, \$12,650 for travel, \$2,400 for publications, and \$19,716 for materials and other expenses--for a total of \$158,903. (This includes \$16,400 NDEA funds)

Leadership Activities

1960-61. The five professional members of the Bureau staff



The Bureau maintained a consistent policy of decentralization of audiovisual service centers. All counties in the state operated, alone or in conjunction with other counties, an audiovisual service center. Large city districts frequently provided their own service centers.

provided consultation service to the 58 counties in the state—generally, at the invitation of the county. The Eureau also made such service available to the nearly 200 other NEM/AV service centers in school systems and publicly-supported educational institutions throughout California. In addition, upon request, consultation was given to NEM/AV service centers in private institutions of higher education. The Eureau staff also assisted other SDE staff members on problems involving the application of NEM/AV knowledge and experience in their special fields. Frequently, this assistance related to curriculum revision activities and the preparation of guides, courses of study, and bibliographies.

During the 1960-61 school year, the Bureau staff sponsored, co-sponsored, or participated in a total of 184 meetings, ranging from one to three days in length, with an estimated attendance of 14,140. Audiovisual directors, administrators, supervisors, teachers and librarians comprised most of these audiences. New media, particularly ETV and language laboratories, were featured in many of the presentations and discussions.

Publication activities of the NEM/AV unit within the California State Department of Education included: (1) a directory of personnel responsible for NEM/AV services in schools and colleges throughout the state; (2) Television in California Schools; and (3) "Let's Listen"—a radio program listing, published two to four times a year and distributed to 9000 educators. The 1960-61 publication budget of the Bureau was \$7,500. Bureau staff members served on committees of the state NEM/AV association which published pamphlets and brochures needed for the development and improvement of NEM/AV activities and services within the state. Two such publications were: Your Audio-Visual Program—a handbook for principals; and Room Darkening for Audio-Visual Instruction.

In 1961, the Bureau was active in working with the state legislature for the passage of a permissive bill authorizing county school superintendents and school districts to own and operate educational television stations. This legislation culminated nearly nine years of active support by the Bureau of ETV development within the state which began in September 1952 with a conference called by the SDE to consider uses of the eight ETV channels allocated by the FCC to California. Recommendations of this group led to the Governor's (Farl Warren) Conference on Educational Television (December 1952) attended by some 2,000 participants. As an outgrowth of this conference, a Citizens Committee on Educational Television was appointed by the Governor; the Bureau chief³ served as executive secretary of this group.

Recommendations of this committee (together with those from other groups) led to legislation which in 1955 approved appropriations for experimental television developments in state colleges; and in 1957, authorized use of state educational funds for ETV; and



³A Plan for Educational Television in California was developed by the Bureau chief (Francis W. Noel) in 1954, as a doctoral dissertation.

again, in 1961, assured passage of the bill mentioned earlier in this discussion.

1964-65. Since its inception in 1945, the California Bureau of Audio-Visual and School Library Education services has supported a policy encouraging decentralization of its services, the acceptance of local responsibility, development of local leadership in guiding the growth of NEM/AV service centers, and the furnishing of other essential facilities (including educational radio and ETV stations) to improve teaching and learning in the schools. The Bureau has also followed a policy of seeking state financial support earmarked for such programs. Significant growth of NEM/AV facilities and services has occurred throughout the state as a result of these policies. In 1945, at the inception of the Bureau, there were only 16 audiovisual education service centers in the state's districts and county school offices. Chief of the Bureau reports that in 1964-65 there were 57 county superintendent of school NEM/AV service centers, 121 city school district centers, 46 junior college centers, and 34 centers in other institutions of higher learning. In addition, there are 21 educational radio stations and seven ETV stations operating in the state.

Because of California's size, its rapid population growth, the large numbers of NEM/AV centers operating within the state, the rapid expansion of school NEM/AV activities, and limited central staff, the Bureau has been required to develop means of fulfilling leadership responsibilities other than through timeconsuming personal contacts. A particularly effective means toward this end is the Bureau's work within the state audiovisual education professional organizations and, to a lesser extent, with audiovisual commercial dealers' organizations. staff continues to cooperate with the Audio-Visual Education Association of California in planning and presenting the annual statewide professional conference, attended in 1965 by more than 2,500 persons. The California State Superintendent of Public Instruction issues call letters for this conference. The five sections of the association also hold from two to five sectional meetings each year. Bureau staff personnel are customarily invited and are expected to attend these meetings to discuss NEM/AV problems with members.

During summer 1965, the Bureau conducted a one-week workshop on "New Media and Changing Educational Patterns", attended by more than 175 delegates. Each year the Bureau compiles and publishes a directory of California NEM/AV personnel, including names of persons having major responsibilities for NEM/AV programs and services. Also included are names of officers of state NEM/AV professional organizations as well as a list of radio and ETV stations.

Manuscripts completed during the year, waiting publication during 1966, include one on the application of data processing to NEM/AV activities, an evaluation of California audiovisual education programs and a report describing the new media workshop mentioned above.



Operational Services and Activities

1960-51. The Bureau of Audio-Visual and School Library Education maintained a total of 227 units of 14 types of NEM/AV equipment, including the following: 16mm motion picture projectors; slide and filmstrip projectors; sound slide film projectors; overhead projectors; opaque projectors; tape recorders; phonographs; teaching machines; and closed-circuit TV units. More than 1800 units of materials were available through the Bureau. Equipment and materials were regularly available to aid SDE personnel in performing their regular duties.

Although priority was given to SDE personnel for the loan of NEM/AV materials and equipment, staff members in other state agencies were also able to borrow these items. For example, the closed-circuit television units were used by schools and colleges for demonstration and experimentation. Other materials and equipment were not available to public schools that were found to be served by county or local school district NEM/AV centers.

The Bureau also maintained a graphics production unit and a photographic laboratory to serve the needs of the SDE. In addition to developing certain materials for use by the professional SDE staff, technical personnel often consulted on problems of NEM/Ay production.

1964-65. The 1964-65 operational services and activities of the California Bureau of Audio-Visual and School Library Education remain substantially the same as for 1960-61. The Bureau chief reports that funds are available for the purchase of equipment needed for SDE staff use. No change was reported in policies regulating use of equipment and materials by other agencies of state government, for school district experimental projects, or for the SDE staff itself. The Bureau continued to provide graphic artist and photographic services to the department.

Research and Development Activities

1960-61. No specific research studies related to NEM/AV programs were conducted by the California Bureau. Nevertheless, it had on occasion used the SDE research section for the collection and analysis of specific data on NEM/AV matters requiring statistical information. The Bureau encouraged and supported graduate student research in NEM/AV education in institutions of higher education by supplying problems for study and making its resources available for student use. In like manner, the Bureau had a record of cooperating with the state NEM/AV association in its regular program of research and publication.

1964-65. In the two years since 1964, the Bureau of Audio-Visual and School Library Education has assigned a consultant full-time on school library research, studying district and county school library needs. His report will be used primarily as a basis for planning a long-range school library development program under Title II of ESRA of 1965 Library Resources projects.



An increasing number of film libraries are now turning to automated data processing. The Bureau itself is conducting a study of various systems and methods with the expectation that a uniform system can be developed capable of being used interchangeably by NEM/AV centers throughout the state.

A third major research project nearing completion is a study of city and district NEM/AV services conducted with a view to developing evaluation criteria for such services. This instrument is being designed for use in self-evaluation or by teams of NEM/AV specialists and staff members of school districts who request the SDE_to evaluate its NEM/AV services.

Regulatory Activities

1960-61. In 1960-61, California elementary schools were not accredited although to be eligible for state funds they were required to meet specified standards. At the same time, secondary schools were evaluated by means of self-appraisal procedures and recommendations of a visiting evaluation team that included SDE members. Criteria set up by a professional association of secondary school administrators, used as the base for standards, did not specify minimums for NEM/AV equipment and materials, physical facilities, or training and skills for personnel performing NEM/AV tasks.

Certification requirements for elementary and secondary teachers called for a two-unit semester course (or equivalent) in audiovisual education to renew teaching certificates. Beyond this, there were no other NEM/AV requirements for teachers. No special certificate existed for NEM/AV designated personnel. At the county level, however, such positions required a supervisory-or administrative certificate.

At the time of this study, the certification system was being revised; the California School Library Association recommended inclusion of NEM/AV training in new standards for a school librarian certificate.

The California SDE itself had no general school plant standards pertaining directly to NEM/AV facilities. However, recommended standards for room-darkening, ventilation, electrical facilities, and similar NEM/AV matters, developed cooperatively by the Bureau and the Audio-Visual Education Association of California, were available to local school districts. Under certain conditions, school districts were certified as eligible for special state aid for school construction if they included specified NEM/AV facilities as determined by the rules and regulations of the Department of Finance Allocation Board.

The SDE did not publish standards covering NEM/AV equipment for school purchase, except those involving Federal requirements for NDEA purchases.

By law, the California State Superintendent of Public Instruction could provide up to 50 % of the costs of county audio-visual services. All 58 California counties provided such services for local school use. During the school year 1960-61, the



SDE allocated (on a district matching basis) a total of \$1,983,000 to provide this direct support of county audiovisual services. No other state school funds were specifically earmarked for NEM/AV activities, although local districts were empowered to allocate their own funds for NEM/AV activities, resources, and services.

1964-65. Regulatory activities of the California SDE, in 1964-65, remain substantially the same as those of 1960-61-with two notable exceptions. The first exception involves the earlier two-semester unit audiovisual education requirement for teachers which has now been discontinued under a new credentials revision program. Despite this move, however, audiovisual instruction is still required for credentials in a special ruling that states: "To be accredited to recommend a candidate for a teaching credential (basic to all others), a teacher education institution (private or public) shall include within appropriate professional courses required for any credential, instruction in the use and educational value of audio and visual aids."4

4 Section 822, Article 2, Title 5, California Administrative Code.

Under California regulations, school districts which by contractual arrangement with ETV stations contribute financially to the production of instructional television programs for classroom use may be reimbursed, upon proof of proper utilization, up to 50 cents per pupil use. This amount may be claimed only once per school year per pupil, regardless of the number of instructional television programs viewed or produced during the school year. School districts not contributing to the production of such programs are not eligible for reimbursement.

During the 1964-65 school year, the California SDE allocated to county audiovisual education centers, on a district matching basis, a total of \$2,473,269--an approximate 25% increase over the amount allocated for these same purposes during 1960-61.

Significant Changes Since 1960-61

The Chief of the Bureau of Audio-Visual and School Library Education, the California SDE, reports three significant changes since 1960-61:

- * Allocation of \$800,000 to support instructional television (\$.50 per viewer) and the appointment of an official Public School Instructional Television Committee.
- * Addition of two consultants, plus a secretary, to handle school library education problems.
- * Provision of more services (financed by NDEA) through workshops, demonstrations, provisions for equipment, and additional staff.



CONNECTICUT

NEM/AV Organization and Finance

1960-61. During 1960-61, in Connecticut, a Consultant in Audio-Visual and Television Education assigned to the Bureau of Pupil Personnel and Special Educational Services in the SDE Division of Instructional Services was responsible for NEM/AV activities and services. A total of 40 other consultants and eight service specialists within other SDE offices also gave advice on NEM/AV activities in relation to the regular work of their bureaus. All SDE consultants served the 169 school districts, various educational institutions (including technical and vocational schools), and public libraries throughout the state. In addition, during 1961, special consultants from outside the SDE were employed on short-term contracts to develop course materials for use on educational television programs.

The 3DE Consultant in Audio-Visual and Television Education spent full-time on NEM/AV activities. The 48 other professional persons spent from ten to twenty per cent of their time on such activities. To support these activities, a clerical and technical staff consisting of one full-time clerk, one half-time stenographer, a full-time technician, and the equivalent of a full-time student helper, were employed.

The NEM/AV consultant's position required a doctor's degree, 10 years of experience in teaching, experience in supervision and/or administration, and certification as a general supervisor.

The budget allotment for NEM/AV activities in Connecticut, separately identifiable in the 1960-61 budget was \$24,159. Of this, \$16,671 were spent for salaries and \$3,00 for materials to be circulated; the remainder (approximately \$4,500) was used for other miscellaneous expenses.

1964-65. The 1964-65 organization, staffing pattern, and operation of the Connecticut NEM/AV unit was very similar to the 1960-61 pattern. Availability of NDEA funds at this time made it possible for the SDE to appoint an additional NEM/AV consultant in the summer of 1965. Beginning in 1965, NEM/AV consultants, as well as all other SDE consultants, were expected to assume broad responsibilities, over and beyond their specialities, in working with school systems throughout the state in carrying out provisions of Title I, II, and III of the Elementary and Secondary Education Act, as well as a state act passed by the 1964 legislature which basically duplicates Title I of 89-10. Qualifications for the professional positions were unchanged.

The 1964-65 budget for NEM/AV activities and services totaled \$35,700 with \$25,900 for salaries; \$750 for travel; \$1,000 for publications; \$3,500 for materials for circulation; and \$4,500 for other expenses. This represents an increase of nearly 50% over a four-year period.



Leadership Activities

1960-61. In 1960-61, the Consultant in Audio-Visual and Television Education of the Connecticut SDE, worked closely with 35 full-time school district directors of audiovisual education as well as large numbers of NEM/AV building coordinators. Requests for consultation with and service from the NEM/AV consultant and other SDE personnel usually followed staff visits to local school or curriculum planning and in-service education meetings.

Seven conferences sponsored by the SDE, and relating entirely to new educational media, had attendance of more than 500 persons; two orientation meetings for new principals emphazing NEM/AV activities and services were a part of this program. The NEM/AV consultant also participated in numerous workshops in local districts as well as in various meetings of professional and lay groups.

NEM/AV publication activities in Connecticut during 1961 were limited primarily to mimecgraphed bulletins on NEM/AV topics. One annotated bibliography of resource materials for guidance including a listing of selected NEM/AV materials was also produced. The NEM/AV service also distributed numerous publications prepared by professional organizations or various commercial groups.

At the time of the SAVES Study, 5 the SDE had a record of

participating in educational television activities in the following ways:

- * The State Commissioner of Education was a member of the Board of Trustees of the Connecticut Educational Television Corporation, a non-profit corporation to promote and develop educational television. (The state legislature had appropriated approximately \$100,000 in support of this corporation.)
- * The Consultant in Audio-Visual and Television Education and other members of the SDE staff participated in a School Telecast Council which, among other things: (1) made recommendations to the State Board of Education on the development and use of ETV for schools; (2) suggested curriculum areas and content for school telecasts; and (3) planned for research on and evaluation of school television programs.
- * Members of the SDE staff, assisted by special consultants (outside the SDE), developed curriculum outlines for various subjects to be included in telecasts. These were submitted for approval or change to the State Board of Education, then forwarded to the ETV Corporation.
- * In an effort to develop interest in ETV and skill in its



Prior to 1961, the SDE had produced about 76 telecasts and had cooperated with the state colleges in the planning and production of 250 ETV programs.

use, the Audio-Visual and Television Education consultant arranged with local schools for experimental uses of closed-circuit TV equipment packages and assisted school personnel in developing and presenting closed-circuit telecasts.

1964-65. By 1964-65, the NEM/AV staff of the Connecticut SDE had been instrumental in initiating and establishing NEM/AV service centers in every city in the state of 20,000 persons or larger. Directors of these NEM/AV centers in these cities, together with 12 NEM/AV specialists in the state's universities and colleges, are now playing key roles in improving instruction in the Connecticut schools through use of NEM/AV media. As might be expected, the state Consultant in Audio-Visual and Television Education spends a major portion of his time and effort in encouraging cooperative undertakings with such NEM/AV leaders.

The SDE NEM/AV unit itself sponsored or co-sponsored 16 meetings during 1964-65 (mostly of one-day duration). Six of these meetings for city NEM/AV directors stressed leadership responsibilities for NEM/AV services. Additional meetings were held with these individuals on problems of administering NEM/AV service centers. Other conferences included: (1) two co-sponsored with the Connecticut Audio-Visual Education Association, (2) a statewide ETV conference for teachers and administrators, (3) an ETV meeting for mathematics specialists, and (4) an ETV conference for demonstrating a multimedia demonstration broadcast over closed-circuit television facilities.

As in 1960-61, publication activities were limited primarily to mimeographed bulletins that dealt with sources of NEM/AV materials and equipment and offerings of the SDE film library. As was the case previously, the unit distributed NEM/AV publications to schools which had been prepared by professional, and sometimes commercial, organizations.

During the year the School Telecast Council developed a television program schedule for 1965-66. The selection and scheduling of programs for such use were Based upon extensive previews of kinescopes and video tapes and upon the evaluations of previous programs by more than 5,000 teachers. The number of pupils viewing educational television programs is estimated to be in excess of 60,000 in the Channel 4 area. Major obstacles to the wider use of such programs were reported to be (1) quality of/programs, and (2) the limited assessment of \$1.00 per pupil for support of the educational television activity.

The Audic-Visual and Television Education consultant has continued to spend considerable time helping school systems plan and develop closed-circuit television installations among school buildings of a given district. One such development is found in the Darien School District which has 11 schools interconnected by coaxial cable. Plans to connect 23 school buildings in Norwalk by microwave are presently being developed. A number of large projects involving a dozen or more school systems using closed-



circuit television and data retrieval systems also have been approved under Title III of the Elementary and Secondary Education Act; it has been the function of the NEM/AV consultant to cooperate in planning and development of such projects.

Operational Services and Activities

1960-61. In 1960-51, the central SDE office provided a library of audiovisual materials available without charge to all schools and groups within the state. By policy, this library served not as a primary source of NEM/AV materials eavailable to schools but only as a supplement to other local sources. It included approximately 1500 motion pictures, 750 filmstrips, 2500 slides, 17 programmed texts, and 500 discs and tapes. These materials were also available for use within the SDE itself and by SDE staff members for in-service educational purposes.

Equipment owned by the central SDE office included such items as motion picture, slide, opaque, and overhead projectors; tape recorders; record players; a few teaching machines; and some photographic equipment. Many SDE staff members were found to own personal sets of NEM/AV materials which they used in carrying out their departmental responsibilities.

The Connecticut SDE also had joined with five other states in producing motion pictures on library services, and at the time of the study, the NEM/AV consultant was cooperating with the Division of Vocational Education on planning a film to be produced by that office. By policy, the SDE encouraged local school units to develop their own local facilities for the production of graphics and other inexpensive audiovisual instructional materials.

1964-65. In 1964-65, NEM/AV material and equipment services to Connecticut SDE staff members continue to be similar to those reported for 1960-61. While equipment and material inventories were not reported, it was observed that with the availability of NDEA funds, SDE staff personnel had adequate supplies of items they needed.

The development of new city NEM/AV service centers was the major focus of activity during 1964-65; other NEM/AV activities and services had not changed noticeably, except for increased attention to the distribution of films and video tapes. Instructional film circulation had increased from approximately 5,000 items for the year 1960-61 to more than 6,000 in 1964-65. The increased use was attributed, in part, to the SDE's issuance of a subject area film catalog for every science teacher in the state and a second list for teachers of technical, vocational, and industrial art subjects. During 1965-66, a listing of social studies, psychology and education, and elementary films also will be provided for all social studies teachers, all elementary teachers, and all teacher training institutions.

One film on vocational education was produced during 1964-65; one set of 20 large transparencies was produced commercially for a federally-sponsored workshop for social studies teachers under direction of the NEM/AV consultant.



Research and Development Activities

1960-61. At the time of the original SAVES Project, the Connecticut SDE had not requested or conducted any research related to NEM/AV activities or services.

1964-65. Although no new research was reported for 1964-65, several research proposals under Title VII, NDEA, concerning NEM/AV were being drafted for submission to the USOE. 6

See <u>Leadership Activities</u> for information concerning ETV developments.

Regulatory Activities

1960-61. Accreditation of Connecticut schools was found not to be a function of the SDE. However, by this time, it had

Secondary schools could apply to the New England Association of Colleges and Secondary Schools for accreditation.

begun to develop graduated standards for future approval of elementary and secondary schools, and these were expected to include standards related to NEM/AV materials and equipment. The state's educational association was also active in supporting the development of these accreditation standards, and the Connecticut Audio-Visual Education Association supported inclusion of specific NEM/AV standards.

A NEM/AV course was included in the group of courses recommended for classroom teaching certificates, but the taking of the course was optional depending upon the teacher education institution. Audiovisual methods were integrated in some subject matter courses required for certain secondary teaching certificates. Certification requirements for administrators, supervisors and school librarians did not contain references to NEM/AV training or experiences. Requirements for the library certificate were undergoing revision at this time; and it was anticipated that, in the future, they would contain NEM/AV course requirements. A certificate for supervisors included endorsements related to NEM/AV competencies for directors of NEM/AV centers and/or specialists in media production and required a master of science degree in audiovisual administration.

Although not specified by the SDS at the time of the study, NEM/AV standards for school buildings and facilities were anticipated. These were expected to be included in a bulletin prepared by the SDE School Building Advisory Committee to cover such items as: specifications for light control, master TV antannae, and/or flexible instructional units. This same bulletin also urged school boards to give consideration to providing facilities for the use of conventional NEM/AV materials and equipment as well as newer media such as teaching machines and television.



The SDE did not publish standards related to NEM/AV equipment for school purchase, except for Federal requirements related to NDEA purchases.

State aid funds could be used for NEM/AV expenditures by local districts, but no funds were specifically earmarked for this purpose. In 1960-61, local districts spent \$251,748 on instructional materials, other than textbooks, from a total of \$43,822,880 in state aid funds expended.

1964-65. By 1964-65, the Connecticut SDE had published standards for elementary and secondary schools. These standards included items concerned with school ownership and use of NEM/AV equipment and materials.

The certificate for supervisors having NEM/AV responsibilities now requires a master's degree and NEM/AV course work.

School building and facilities standards now require the NEM/AV standards referred to in the 1960-61 portion of this section.

The SDE now publishes standards covering purchase of NEM/AV equipment and materials by schools.

State funds continue to be used for NEM/AV purposes, subject to local school board approval.

Significant Changes Since 1960-61

The Consultant in Audio-Visual and Television Education reports the three most significant changes since 1960-61 to be:

- * A sharp increase in the budget for NEM/AV activities
- * Establishment of an additional professional position in the NEM/AV unit
- * In increasing awareness of skills in using NEM/AV by the professional staff of the state department of education.

HAWAII

NEM/AV Organization and Finance

1960-61. During 1960-61, the Hawaii State Department of Education established an Audio-Visual Center--the unit primarily responsible for NEM/AV activities and services within that state. Functioning as part of the Division of Curriculum, Instruction, and Guidance, the Center was staffed by three professional members, three technicians, and four clerical workers, all employed full-time. The Director, the Program Assistant, and the Audio-Visual Graphic Artist comprised the entire professional staff. Additionally, 18 subject matter supervisors (all regular full-time SDE staff members) provided advice and counsel on NEM/AV matters in the course of their regular work.

Educational and experience requirements for the position of Director included a master's degree plus 20 semester-hours and



five years of teaching and administration, plus two years in NEM/AV administration. For the position of Program Assistant, a master's degree, five years of teaching, and additional training and experience in the NEM/AV field were required. A bachelor's degree was necessary to qualify for the Audio-Visual Graphic Artist assignment.

The total identifiable budget for the Center in 1961 was \$255,595, of which \$57,210 was for salaries; \$2,000 for travel; \$5,000 for publications; \$110,438 for materials for circulation; \$73,502 for NEM/AV materials; and \$7,445 for other expenses.8

In assessing the size of this NEM/AV budget, it should be understood that the state department of education responsibilities, organization, and operation for Hawaii are similar to those of a single large school district. The SDE of the state of Delaware provides still another example of this type of SDE organization.

1964-65. By 1964-65, the policies, organization, and services of the NEM/AV unit had undergone a number of changes, some of which are noted as follows:

- * The State Audio-Visual Center is now within the Audio-Visual Education Section of the School Libraries and Instructional Materials Branch, an administrative unit of the Library Services Division. (The latter is also responsible for all school, public and state libraries.) Heading this Division is an Assistant Superintendent who reports directly to the Chief State School Officer.
- * Between 1960-61 and 1964-65, the full-time NEM/AV staff expanded from three to nine professionals. A Director of Educational Television, between two ETV Program Specialists,

and four television teachers were added. The Branch director spends half-time on NEM/AV matters, and the Division head (Assistant Superintendent) devotes ten per cent of his time to these matters. Thus, the equivalent of 9.6 full-time professional positions are now assigned to NEM/AV activities and services. Full-time clerical-technical workers have increased from seven to nine; part-time workers include several members of the data processing staff who spend an estimated ten per cent of their time on film booking operations. Additionally, subject matter supervisors and other SDE staff members are expected to provide assistance on NEM/AV matters in their special fields.

* To qualify for the professional positions, applicants



Since the summer of 1965 the ETV staff has been moved from the School Libraries and Instructional Materials Branch to the Curriculum, Instruction, and Guidance Division and the ETV Director reports to the Assistant Superintendent for Curriculum.

must now meet the requirements for the Teaching Certificate and must have earned the twenty additional credits which are required for the Professional Certificate. They must also hold a master's degree, or equivalent, have a concentration of course work in curriculum, audiovisual education, library science, and related studies. Experience requirements include five to ten years of teaching, plus supervisory or administrative experience in special fields related to NEM/AV positions applied for. Applicants are also expected to demonstrate administrative ability, mature judgment, and other personal characteristics essential to success in such positions.

* Whereas in 1960-61 the basic policy for the NEM/AV unit was oriented toward increasing centralization at the state level, the present policy appears to encourage decentralization and establishment of instructional materials service centers in individual schools where low cost instructional materials may be made easily available. However, distribution of films, high cost items, appears to remain centralized, although district centers on neighboring islands now maintain collections of the most frequently used titles.

The budget for NEM/AV activities for 1964-65 was \$369,396 allocated as follows: salaries, \$78,212; travel, \$1,325; materials for circulation, \$194,479 (includes \$10,000 NDEA funds); other expenses, including circulation costs; repairs, graphic production, and communications, \$35,380.

It should be noted that the University of Hawaii has budgeted approximately \$1,250,000 to meet its share of the costs of the ETV programs developed in cooperation with the SDE.

Leadership Activities

1960-61. The majority of requests for consultation, inservice meetings, and assistance on NEM/AV problems followed visits to the Audio-Visual Center by school district personnel. Mail and phone inquiries from the island school districts were a second important source of such requests; informal contacts at in-service meetings usually brought still other requests for service and/or advice on NEM/AV matters.

Twelve workshops dealing with uses of new educational media and conducted with groups of principals, NEM/AV coordinators, and school faculties were attended by a total of nearly 600 educators. Most of these workshops occupied less than half a day; a few were as long as two days.

The Hawaii NEM/AV Center's publication activity consisted principally of catalogs ("Educational Motion Pictures for Hawaii Public Schools", "Filmstrips for Use at the Elementary Level", for example,) and special listings of NEM/AV materials for guidance, art, and similar curriculum areas. A monthly newsletter published for the SDE was devoted in part to NEM/AV matters.



As the result of an earlier survey (see the section on Research and Development Activities) which had recommended a statewide system for ETV, the Governor of Hawaii appointed an Educational Television Advisory Committee. At the time of the original SAVES Project, a budget and enabling legislation were being drafted to permit installation of a television station, using matching Federal funds. (This legislation and budget were to be submitted to the 1963 legislature.)

1964-65. Beginning in 1962, the NEM/AV section working with school libraries was transferred to the Deputy Superintendent for Instructional Materials and Initial measures were taken to provide better coordination of these two services. With the addition of an Assistant Superintendent for Library Services, in August 1964, efforts toward integration were intensified.

Leadership activities included consultation on NEM/AV matters. with educators at all levels of the state's educational system, planning for and participating in fourteen NEM/AV workshops and conferences, and preparation of numerous publications. Among the publications released by the Audio-Visual Education Section were the following: Educational Motion Pictures for Hawaii Public Schools (1964 Supplement); Field Trips in Hawaii for Elementary Schools in the District of Oahu; Elementary Science Film Guide; Sources of Materials for Use in Making Bulletin Boards and Transparencies; Materials Useful in Creating Pimension When Producing Bulletin Boards, Posters, and Displays; AV News (published monthly during the school year).

In 1964, a television project, 10 jointly sponsored and

This project was an outgrowth of the recommendations made in the 1960 survey.

developed by the University of Hawaii and the SDE, was begun. The legal base of this project provides for an advisory and policy—making committee composed of the President of the University, the Superintendent of the State Department of Education, and one other member appointed by the Governor. The SDE's responsibility is carried by the Director of Educational Television and two program specialists in ETV (of whom there was only one in 1964, when the project started). In the fall, 1965, four television teachers were added to the staff. The SDE is now responsible for program planning and television teaching, while the University retains responsibility for technical production and broadcast facilities. The SDE provides television receivers for Hawaii's schools. Initial programs were scheduled to begin in March, 1966.

Operational Services and Activities

1960-61. A large inventory of NEM/AV materials was available to the SDE staff for their use in conferences and workshops. Among materials provided were filmstrips, slides, overhead transparencies, tapes, disc recordings, study prints, and motion



pictures. The film library itself contained some 4,300 prints that were used not only by SDE personnel but were circulated to other state agencies, institutions of higher education, and all local public schools. Film bookings in 1961 totaled 19,000. Policies relative to the circulation of the other materials were being developed at the time of the study.

Equipment in the Center included motion picture projectors, slide projectors, everhead and opaque projectors, tape recorders, phonographs, radios, and one TV set. These were for use by the staff of the Center and by other SDE personnel.

Production activity for 1960-61 was limited to a single filmstrip for civil defense education.

1964-65. By 1954-65, the Hawaii SDE film collection had increased to 7,721 prints (from the 4,300 reported earlier). More than 1,200 additional prints are contained in centers on other islands. Film circulation had increased from 19,000 reported for 1960-61 to 47,000 for 1964-65. However, the fact that film requests totaled some 97,000 meant that it was necessary for more requests to go unfilled than were honored. Shortages of film materials and personnel to handle them were principal reasons for the inability to service these requests. To solve this problem, the following steps have been taken:

- * Two film maintenance men were added to the SDE staff.
- * Data processing was inaugurated in the fall of 1965.
- * Schools were given a weekly allotment of bookings, based on their previous records of use, their size, and their level.
- * Additional copies of certain basic, most frequently requested films were purchased.
- * After extensive re-evaluation, approximately 450 prints were withdrawn from circulation.

As a result of these changes, it is now anticipated that about three-fourths of all requests for films will be filled.

NEM/AV services continue to be provided to SDE staff members; limited services are given to state offices outside the SDE. With the availability of NDEA funds, additional equipment items have been purchased for SDE use.

Research and Development Activities

1960-61. In May, 1960, a survey of the status of and needs for audiovisual education in Hawaii was made at the request of the State Superintendent of Public Instruction and the Dean of the College of Education of the University of Hawaii. Their joint request, made to the Educational Media Branch of the USOE, resulted in a contract to provide the survey, Il which evaluated the

The findings of this study are reported in Audio-Visual Education in Hawaii, USOE, Department of Health, Education, and Welfare: Washington, D. C., 1960. The survey team included



Charles F. Schuller, Harry J. Skelly, and Donald Scott.

status of NEM/AV organization, and activities at state, district, and local levels and made recommendations for immediate action and long-range development. Major recommendations of this study related to: (1) the appointment of a State Director of Audio-Visual Education at a high professional level within the staff organization; (2) establishment of district NEM/AV centers; (3) improvement of light control facilities in classrooms; (4) improvement of teacher education in the newer media; (5) increased financial support for audiovisual education; and (6) development of plans for a statewide ETV network.

Another research activity of the SDE in 1960-61 was an experimental study of closed-circuit television for foreign language teaching. This pilot study was limited to one school.

1964-65. The SDE's major developmental activity by 1964-65 was centered on the ETV project discussed earlier.

Routine reports of statistical information on numbers of film bookings, circulation, and other operational aspects of the NEM/AV program were made during the year,

A survey of all NEM/AV equipment in Hawaii schools is planned for 1966. (Advance information from the survey indicates that overhead projectors, alone, have increased from 164 in 1963 to 624 in 1965.)

The Audio-Visual Education Section was involved with the University of Hawaii in planning for the first NDEA Educational Media Institute for the summer of 1965.

Regulatory Activities

1960-61. Since schools in Hawaii are in effect controlled from the state level, they are administered somewhat like a large school district. District superintendents are responsible to the State Superintendent of Public Instruction. The SDE does not accredit schools in the usual sense.

In 1960-61, certification requirements for teachers, supervisors, administrators, school librarians and NEM/AV designated personnel contained no reference to NEM/AV training or experience. A competency requirement in NEM/AV education for school personnel was recommended by the SDE, and it was expected to be adopted.

Development of NEM/AV equipment standards recommended for both elementary and secondary schools resulted from the statewide survey. A plan for attaining these standards was projected for a five-year period. These standards established recommended equipment-pupil ratios for projectors, sound equipment, screens, roll carts, and cameras.

By 1960-61, the SDE had published building standards applying to elementary and secondary schools. Contained in them were specific NEM/AV requirements within instructional areas, as well as general standards for room-darkening, chalkboards and tack-



boards. Revision of these standards, in progress at the time, was expected to include still other specific NEM/AV requirements.

Specifications for NEM/AV equipment were published; these were mandatory and applied to purchases for elementary and secondary schools. The standards themselves had been developed without reference to NDEA requirements, but they applied to equipment acquired under its provisions.

State funds earmarked for NEM/AV purposes at school district and state levels were allocated on the basis of \$.50 per pupil (Grades 1-12). Additionally, NDEA funds for the acquisition of materials and equipment were distributed on the basis of \$2.00 per pupil (Grades 1-6), \$3.00 per pupil (Grades 7-9), and \$4.00 per pupil (Grades 10-12)]. Funds allocated on the basis of \$.60 per

12These NDEA funds were not specifically earmarked for the acquisition of materials and equipment. In practice, however, they were largely used for such purposes.

pupil (Grades 1-12) were earmarked for the acquisition of materials and equipment at the state level.

1964-65. By 1964-65, regulatory functions of the SDE continued to be much the same as those of previous years. It should be noted the SDE still does not accredit local schools. However, recent standards for the licensing of private schools contain reference to NEM/AV requirements.

Certification requirements for teachers and administrators still do not include NEM/AV course work. Certification requirements for school librarians now include NEM/AV course work.

State funds to schools specifically earmarked for NEM/AV equipment and supplies were increased from \$217,000 in 1963-64 to \$492,000 in 1964-65.

Significant Changes Since 1960-61

Significant changes since 1960-61 are reported for Hawaii as follows:

- * An increasingly favorable attitude toward NEM/AV by educational leaders throughout the state and by high level officials in state government
- * Closer coordination between NBM/AV school and library activities
- * Significant increases in state and Federal (NDEA) funds for NEM/AV, thus making possible the acquisition of needed additional NEM/AV equipment and materials
- * Introduction of data processing in servicing film library requests
- * Progress in developing ETV facilities for schools throughout the state
- * Formal approval of a policy of decentralization of NEM/AV services.



NEW YORK

NEM/AV Organization and Finance

1960-61. The New York State Education Department was found to be a large, complex organization. The major unit responsible for NEM/AV, under the direction of the Associate Commissioner for Cultural Education, was the Division of Educational Communications. This administrative unit planned and coordinated educational television installations, programs, and research studies. It also promoted the educational use of mechanical, electronic, and optical aids to learning. All SDE NEM/AV activities related to NDEA were handled by a separate administrative unit for NDEA.

The Division of Educational Communications staff included a Division head and a Bureau head assisted by 13 professional persons (who served as Associates, Assistants and Supervisors), seven steno-clerks, and four technical workers. Three part-time Educational Aides (students) also assisted in the work of the Division. Totals included employees of state-operated television stations. Thus, the full-time staff included a total complement of 20 full-time and 6 part-time persons and three educational aides. All Division of Educational Communications personnel normally served the state as a whole.

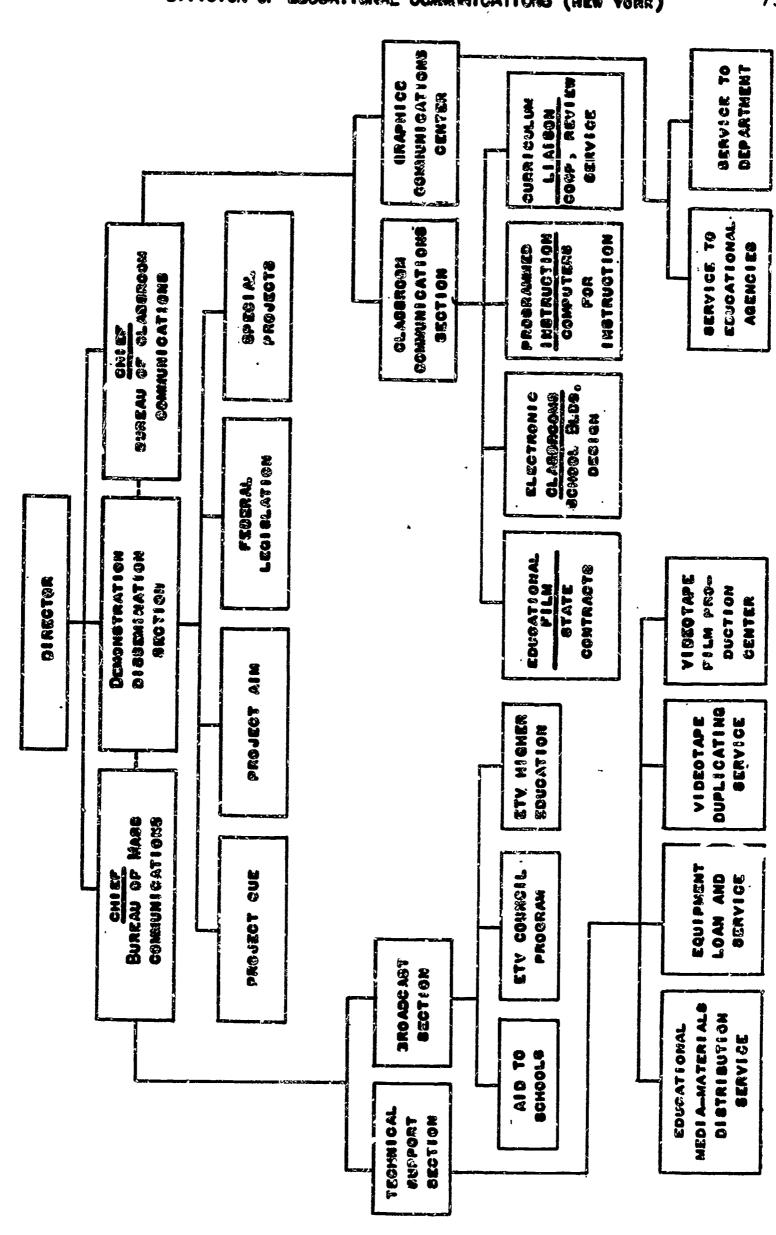
Qualifications required for NEM/AV personnel in the New York SDE varied according to responsibilities and specializations of positions. All individuals were selected and served under civil service rules and regulations. A master's degree (with 12 hours in educational communications) was required for positions at the associate and assistant levels. On the supervisory level, a master's degree was required, plus 60 graduate hours and appropriate experience in educational communications. Experience requirements varied from three to five years in education with a minimum of two years in educational communications work. Requirements had not yet been established for some engineering positions. Qualifications for clerical-stenographic positions did not include NEM/AV requirements.

Expenditures for the activities of the Division were separately identifiable in the departmental budget. In the 1961 fiscal year the hudgetary allotment was approximately \$1,000,000, of which some \$320,000 were assigned to staff salaries, \$15,000 for travel, \$40,000 for publications and special supplies, \$165,000 for circulating video tapes, \$260,000 for TV facility rental and telephone cable, and \$200,000 for TV aid to schools.

1964-65. General responsibilities for NEM/AV activities for 1964-65 continued, as before, with the Division of Educational Communications. With the appointment of a new Director, the Division underwent considerable reorganization and expansion. Figure 1 shows the organization of this complex of operations and suggests the scope of activities and services provided. New offices in the Division include a Bureau of Mass Communications. This Eureau is divided into two sections—the Broadcast Section and the Technical Support Section. A second major change observed during the interval of this study was the formation of a Demonstration Dissemination Section directly responsible to the Division director.



The second of th





This Section handles all "short term" projects and activities inside and outside the SDE. As soon as a project becomes a permanent activity, however, it is placed in one of the Division's Bureaus. The Bureau of Classroom Communications remains unchanged.

As in 1960-61, all Division personnel normally serve the state as a whole.

The reorganization of the Division requires personnel to be able to serve at all levels of education, i.e., K-12, higher education, and continuing education. In addition to meeting the requirements called for in 1960-61, new personnel now must be knowledgeable in curriculum for all school levels.

Changes in accounting procedures continue to make it difficult to compare 1960-61 with budget items 13 such as salaries of

131960-61 budget figures include certain ETV personnel not stationed at the SDE headquarters in Albany while the 1964-65 budget figures do not include them.

staff and travel. However, the Division's definable budget for the fiscal year 1964-65 has increased approximately one-third in the five-year period, from \$1,000,000 to \$1,337,000, divided as follows: salaries of staff \$130,000, travel \$100,000, publications \$4,000, materials for circulation \$503,000, and other expenses (including grants to schools) \$400,000. These figures do not include Federal funds which alone amounted to approximately \$105,000 (NDEA Title VII \$70,000 and Title VIII \$35,000) in 1964-65.

Leadership Activities 14

14"Developing the Use of New Educational Media" is a report to show how the New York SDE is implementing leadership responsibilities described in the policy statement by the same title of the Council of Chief State School Officers, Washington, D. C., 1964.

1960-61. During 1960-61, the Division of Educational Communications held approximately 40 meetings concerned with NEM/AV. These meetings, which had a total (approximate) attendance of 5,000 persons, ranged from one-half day workshops on TV camera handling to one 10-day workshop on programmed instruction. In addition, Division personnel participated in approximately 50 PTA meetings and the annual New York School Board Association meeting, where they demonstrated NEM/AV materials and techniques to more than 5,000 school board members. The Department also exhibited and participated in the annual state fair. In 1961, during the fair's 10-day session, more than 60,000 persons visited the Department's exhibit and demonstrations.

Sources of requests for NRM/AV services from the Division came (in rank order of frequency): first, during visits by staff members to local school systems; second, by mail and phone inquiries to the Department, third, through informal contacts at meetings; and fourth, from visits to the Department by local school personnel.

During 1960-61, the SDE produced a number of publications dealing with NEM/AV under such titles as Commissioner's 1961



Catalog of Educational Change, Utilization of Educational Television in New York State, and various research reports. For Many years, the Division published a series of bulletins under the general title, Film Roundup. These bulletins (of approximately 40 pages each) provided film information on such subjects as world history, biology, physical science, and general science.

The Division was also active in promoting the development and use of educational television both within the SDE and

15See sections Research and Development Activities and Regulatory Activities for further comments on ETV.

throughout the state

1964-65. During the school year, 1964-65, several meetings were held following the general pattern described in the 1960-61 report. In addition, the Division of Educational Communications held other meetings of major importance including (1) a statewide Communications Convocation, (2) 12 professional conferences in various parts of the state participated in by 15 of its staff members, and (3) two co-sponsored ETV evaluation workshops. Approximately 2,000 educators in administrative and supervisory positions attended those meetings. The Division reports that the conducting of field meetings is still one of its largest operations.

Requests for NEM/AV services from the Division continue to come from much the same sources as those of 1960-61. The Director of the Division reports that most of the Division's requests for service come as a result of "state projects".

During 1964-65, the Division produced a number of publications, including: The Electronic Classroom: A Guide for Planning; Cinelib Catalog: A Handbook of Programmed Learning Information; Television Facilities in Higher Education in New York State, Survey '62; Educational Communications Convocation Proceedings; and Educational Communications Report (a Division newsletter issued four times yearly). In 1962, the SDE also published a basic report, Television and Higher Education: A Plan for Statewide Development in New York,

The Department, in cooperation with the State University of New York, is now developing a total plan for ETV for the entire state. It should be noted that approximately a third of the Division's budget of \$1,337,000 is used to support ETV.

Operational Services and Activities

1960-61. NEM/AV equipment owned by the Division included such items as 16mm and 8mm motion picture projectors; filmstrip and slide projectors; overhead and opaque projectors; tape recorders; phonographs; radios; television sets; closed-circuit television units; teaching machines; and a number of photographic and graphic production items. Materials included 16mm and 8mm educational motion pictures, kinescope (TV) recordings, video tapes, filmstrips, slides, transparencies, tape recordings, teaching machine programs, and a miscellaneous collection of graphic materials.

During 1961, the Department produced one 16mm motion picture



and four 8mm motion pictures on an experimental basis. The Division also produced approximately 300 ETV programs for school use. Approximately 200 of these programs were recorded on video tape to permit their repetitive use.

Equipment and materials owned by the Division have been described as a collection used by SDE personnel and public school administrators and supervisors for experimental and/or in-service training programs. The ETV programs and video tapes, however, were distributed solely for public school classroom use.

1964-65. Analysis of the New York State NEM/AV equipment inventory indicates a continuing high level of equipment acquisition for the Division. The director reports there are now ample funds with which to purchase equipment or materials for use by the Division staff or other SDE personnel.

With the exception of taped ETV programs distributed to TV stations for educational telecasting and to schools for closed-circuit or 2500 microwave ETV classroom use, the Division does not distribute NEM/AV materials either for use by other departments of state government or in individual classrooms, except for those supplied to various experimental projects. However, the Division does maintain a complete film center (Cinelib) having special application to teacher education in the field of educational communications.

During 1964-65, the Division produced one sound filmstrip; it also entered into contracts to spend \$360,000 for the production of ETV programs. During the four-year period, 1961-65, the Division acquired through production contracts and purchases \$1,500,000 worth of educational television programs. The Division now maintains a graphics communications center for the production of instructional materials needed by Division and SDE staff members.

Research and Development Activities

1960-61. The Division conducted a number of research projects mainly concerned with ETV under the titles: Utilization of ETV in New York State; Measurement of ETV Utilization; The Broadcast Services, Radio and TV; and A Report of the Regents ETV Project on Channel 11, New York City, 1959-60. Since 1958, the SDE leased and operated (during school hours and on an experimental basis) an ETV station in New York City.

1964-65. Studies were conducted by the Division to evaluate the educational communications services in the Farmingdale Public School District, in the Greece Central School District #1, and in the Huntington Public School District.

The Division continues to encourage experimentation and research in applications of new educational media to instruction. In the 1964 re-organization of the Division, a special administrative unit was created to be responsable for its action research program. Research and developmental projects initiated since its creation include: Project Cue (Culture, Understanding and Enrichment) which develops kits of multi-media instructional materials in the humanities; experimentation with 8mm film for individualized instruction; production of experimental filmstrips for individual pupil use; and self-instruction filmstrips on library science.



In 1964-65, the Department also began to develop three additional ETV stations and to operate a second channel in New York City. Also, it has interested and involved approximately seventy-five school districts in the use of both open- and closed-circuit television. School districts now submit a five-year plan for the development of cooperative or private television systems. While each district equips all its schools with a closed-circuit or 2500 microwave television system it may also subscribe to the services of an open-circuit or community antenna television system. For example, 36 school districts in suburban New York City now subscribe to Channel 13's (WNOT-TV) services. At the same time, each of these districts is developing a full closed-circuit system for each school and classroom.

Regulatory Activities

1960-61. To operate in New York State, all educational institutions, both public and privace, were required to be accredited by the SDE. These requirements were state-developed and administered. However, accreditation standards for elementary schools did not mention NEM/AV requirements for personnel, equipment, or materials. Accreditation standards for secondary schools did include requirements for certain items of NEM/AV equipment for social studies and science courses, but failed to mention materials or personnel concerned with them. Minimum physical facilities related to NEM/AV in both elementary and secondary schools were recommended in the accreditation standards.

No NEM/AV certification requirements for administrators, supervisors, or teachers related to NEM/AV course work. (Note: Both the New York State Audio-Visual Council and the Long Island Audio-Visual Council recommended provisions for a New Educational Media supervisor's certificate. Personnel in the SDE's Division of Educational Communications anticipated favorable action covering this recommendation during 1963.)

In 1959, the Department published a pamphlet titled, <u>Planning hools for Use of Audio-Visual Instructional Materials</u>. <u>Provisions C. Tained in it were recommended</u>, but not required, for school con truction. The Department did not publish standards related to NEM/AV equipment for school purchase, except for those related to Federal requirements for NDEA purchases.

The Department had adequate legal authority to engage in and regulate ETV activities.

State-aid educational funds could be used for NEM/AV purposes subject to local school board approval. The Department allocated funds earmarked for ETV purposes. These included matching funds for closed-circuit television units located in various school districts and indirect financial assistance to local television councils by the purchase of recorded television programs.

1964-65. No changes were reported in accreditation standards and procedures.

The Division reports little, if any, support of NEM/AV course requirements either for administrator, supervisor, or teacher certification. While no certification of requirements for Directors of Educational Communications have been adopted as was anticipated



by 1963, there appears to be continuing strong support for such requirements and adoption is expected within the next few years.

No change was reported in standards pertaining to building facilities. However, in 1964 a consultant in school building design specializing in NEM/AV requirements was added to the Division's staff. This person now works closely with the Division of Educational Facilities Planning. He also advises local school authorities on technical matters related to television, language laboratories, light control, and the design of NEM/AV teacher service centers, as well as other special problems of school design relating to NEM/AV.

As in 1960-61, the Division does not set standards for NEM/AV equipment except where such equipment is being purchased with NDEA funds or where the equipment has been placed on state contract.

No change is evident in the authority of the SDE to engage in or regulate ETV activities.

State aid educational funds may still be used in New York State for NEM/AV purposes, subject to local board approval. The SDE continues to provide matching funds for closed-circuit and 2500 microwave television, and indirect financial assistance to television councils through the purchase of recorded television programs. In 1964-65, the Department allocated \$800,000 matching funds for local school district closed-circuit and 2500 microwave television. School districts are also cooperating in ETV projects and using open-circuit television in combination with their closed-circuit or 2500 microwave television system.

Significant Changes Since 1960-61

Several significant changes in NEM/AV activities were noted in New York State between 1960-61 and 1964-65:

- l. The new organizational structure of the Division of Educational Communications provides for coordination and direction of all educational media efforts in the SDE In providing for the specialization of functions, the reorganization enables the Division to serve education more effectively.
- 2. Project CUE (Culture, Understanding and Enrichment) appears to be proving the value of the multi-media approach in using NEM/AV materials and equipment. From its current experimentation in the humanities, the Division hopes to obtain experience useful in guiding the development of multi-media kits for use in other curriculum areas.
- 3. Development of three additional ETV stations and operation of a second BTV channel in New York City, as well as the involvement of approximately seventy-five school districts in open- and closed-circuit television activities, has increased the utilization potential of ETV on a statewide basis.
- 4. As a direct result of NDEA, the Division's operations have been expanded in a number of ways: (a) three full-time professional positions and two half-time positions have been added to the Division staff; (b) Project AIM (Appraising Instructional Materials) has been initiated; (c) six multi-media kits



have been developed; (d) magnetic tape duplicating equipment has been purchased for use with the "Tapes for Teaching" service; and (e) video-tape duplicating equipment has been purchased for use by closed- and open-circuit television stations.

5. Closed-circuit television units have also been installed in department of education offices and conference rooms. A television production center will enable the SDE to produce useful TV materials of a transitory nature. These are not intended to be used for expensive, polished, permanent productions. Already, the service has been used to film a welcome address by a prominent speaker, to videotape demonstration lessons introducing the new social studies curriculum, and to preview numerous video-tape acquisitions. Further expansion of this service is expected.

PENNSYLVANIA

NEM/AV Organization and Finance

1960-61. Major responsibility for NEM/AV activities and services in Pennsylvania at the state level resided in the Bureau of Instructional Materials and Mass Media, an administrative unit in the Division of Special Services. Its central staff of 16 persons consisted of: The Bureau Director; Chief of the Division of Production and Distribution, two Audiovisual Education Specialists; an Audiovisual Equipment Specialist; two Information Writers; five technicians; and four clerk-typist-stenographers. In addition, six professional NEM/AV Specialists served on a regional basis, maintaining residence in areas to which they were assigned. Four persons on the staff of the State Library, a unit of the SDE, also performed NEM/AV duties. All professional members of the SDE also gave NEM/AV information pertaining to their specialized fields.

Fifteen of the 16 Bureau staff members spent full-time on NEM/AV activities in serving the entire state; one Information Writer spent only 60 per cent of his time on NEM/AV duties.

Qualifications required for major staff positions were: Director--doctorate in education, five years experience in administration and utilization of NEM/AV facilities and curriculum development; Chief of the Division of Production and Distribution--master's degree with a major in NEM/AV, four years experience in public education including two years supervision of a NEM/AV unit or its equivalent; Audio-Visual Education Specialist--master's degree, experience in the organization and utilization of NEM/AV facilities and two years teaching experience; Information Writer--bachelor's degree with experience in journalism or communications. With all these positions, equivalents in training and experience were interchangeable.

Only a portion of the NEM/AV unit's operational budget was a separately identifiable item in the Department's budget. For the fiscal year 1961, this budget totaled \$91,235. Some NEM/AV expenditures (for example, the salaries of certain employees)



were charged against the general departmental budget; in other instances, salary costs were paid by the state and county school offices. In neither case did they appear in totals assigned to NEM/AV expenditures.

1964-65. In 1964-65, no change was reported in the basic organization and operation of the newly renamed Bureau of Instructional Materials and services. The Bureau's central staff has 22 persons; there are 19 in regional centers. 16 Four additional staff

For regional specialist and instructional materials center purposes the state is divided into 18 regions in addition to Pittsburgh and Philadelphia. Primarily, because of topography, the state is divided into eight regions for ETV.

members have been approved for 1965-66. Qualifications for staff members remain the same as in 1960-61.

The budget for the Bureau has increased sharply from \$91,235 in 1960-61, to \$193,000 for 1964-65. These funds are allocated as follows: staffing, \$193,073; travel, \$6,000; publications, \$3,700; and materials for circulation and other expenses, \$50,300.

Leadership Activities

1960-61. During the school year 1961, the Bureau staff conducted 104 meetings, attended by approximately 8,900 persons. Eighty-nine of these were half-day meetings that centered on such topics as: programmed learning, ETV and radio, cross-media use, development and operation of regional instructional materials centers, and NDEA programs. Teachers, administrators and supervisors were in the audience. Fifteen one-day meetings were also conducted—these primarily for teachers on the subject of cross-media use. In addition to workshops and conferences, the Bureau staff presented a number of radio and television broadcasts.

Since 1945, all curriculum publications prepared by the SDE have included references to NEM/AV uses and lists of NEM/AV materials for specific subjects. Examples of two such publications, for 1961, were: Guide to the Development and Improvement of Modern Foreign Language Programs in Pennsylvania and Earth and Space Guide for Elementary Teachers.

The Bureau of Instructional Materials and Mass Media published several guides and reports, including the following: A Guide to the Use of Programmed Instruction; a report on the program of the Bureau, and a report of NEM/AV articles and publicity which had appeared previously in newspapers and other publications.

The Bureau staff provided NEM/AV assistance to local school systems in matters pertaining to curriculum revision and in the preparation of guides, units, and bibliographies.

The SDE was responsible for ETV development within the State of Pennsylvania. A State Council of Education adopted policy for the Department regarding educational television.



The Bureau was responsible for developing state plans for ETV including identification of service areas, organization and supervision of regional educational broadcasting councils, and for advising on and approving educational television facilities plans for 14 state colleges. The policies and plans adopted by the State Council of Education were based on recommendations by the Department of Public Instruction which obtained assistance from the Pennsylvania State Advisory Committee on Educational Broadcasting. The NEM/AV unit itself was involved in the production of the telecasts described later.

1964-65. During 1964-65, the Bureau staff conducted 155 meetings concerned with regional and district NEM/AV problems, curriculum development, and ETV. All professional members of the Bureau staff participated in the NEM/AV in-service teacher training programs—which reached approximately 30,000 Pennsylvania teachers and administrators, in addition to parent-teacher groups and the general community.

NEM/AV consultant service was provided to all 14 state colleges, with special attention to the design of college buildings (especially learning research centers) and the development of closed-circuit television facilities.

A full program of 89 NEM/AV workshops was held throughout the state. A state plan for audiovisual workshops was being developed.

A survey comparing available NEM/AV equipment in colleges with desirable standards was made also to determine priorities for equipment purchases.

Film and materials catalogs are being kept current. During 1964, the Bureau published The Status of Educational Television in Pennsylvania, Supplement I; Educational Television in the Classroom, NDEA Audiovisual Standards; and Planning a Television Antenna System for School Use.

The Bureau continues to maintain necessary liaison relationships with the state's museums by planning cooperatively for educational exhibits and extensive school utilization programs.

In 1964-65, for example, The Franklin Institute was visited by more than half a million school children. Five major museums receive direct state aid.

The Bureau director served as chairman of the Association of Chief State School Audiovisual Officers task force which developed the first quantitative standards for audiovisual equipment, materials, and personnel to be accepted nationally.

Operational Services and Activities

1960-61. The NEM/AV unit maintained an inventory of approximately 69 major items of 12 types of NEM/AV equipment for the exclusive use of SDE staff members. Included in these resources were motion picture projectors; overhead, opaque, and combination filmstrip-slide projectors; tape recorders; phonographs; a radio;



TV sets; a closed-circuit TV unit; and various items of photographic laboratory equipment.

Fifteen regional NEM/AV service centers also were organized under the direction of the state NEM/AV unit and partially supported by NDEA funds. These centers circulated to public schools and other educational institutions more than 30,000 motion pictures, 700 phonograph discs, and 222 television programs. At the time of this study, five additional centers were being planned. In addition, the State Library, a unit of the SDE, owned and circulated a collection of filmstrips and slides to the general public.

During 1960-61, production activities included the following NEM/AV materials for use in the state's public schools and colleges: two 16mm films, 500 slides, 83 transparencies, 5,100 tape recordings, 4,110 radio broadcasts, 59 television programs, one filmstrip, and 1,714 graphic items. Television production included a series of three 15-minute telecasts.

The Bureau also made available to schools exhibits of language laboratories, teaching machines, programmed materials, and bulletin board displays.

1964-65. By 1964-65, additional NEM/AV equipment and materials had been acquired by the Bureau for use by the SDE staff. As in other states, since NDEA, available funds were being used to purchase equipment and materials in quantities needed by the staff.

During 1964-65, the 22 regional instructional materials centers (all partially staffed and financed by the SDE and NDEA reimburgements, but principally by member school districts) were being operated by groups of counties, single counties, and large school districts in the state. Together they served about 1,500,000 elementary and secondary pupils (three-fourths of the total public school population). Also available for circulation were 40,000 prints of 16mm films and other NEM/AV materials (exhibits, models, recordings, dioramas, art reproductions, slides, and filmstrips). In 1965, records showed that 50,000 separate items were circulated 471,000 times. The operating budget for these 22 centers totals about \$1,000,000, bringing the total program value to \$4,690,000. The Bureau also maintains an instructional film library of some 5,000 special titles for schools and colleges. These were booked 12,172 times and viewed by 1,315,000 students during 1964-65. More than 700 films were shown for preview and evaluation.

The Bureau also scheduled a "spacemobile", provided by the National Aeronautics and Space Administration, for demonstrations throughout the state. During 1963-64, 106,000 secondary students saw this exhibit; 145,000 viewed it in 1964-65. (In five years of scheduling, it has never missed an engagement.) A film teaching the optimum use of the "spacemobile" is being prepared.

A total of 4,240 NDEA reimbursements, amounting to \$5,395,266, were processed by the Bureau in 1964-65. ESEA Title I procedures, program organization, and administration guidelines were developed



and the first Title I projects were approved.

All schools and colleges may send blank magnetic tapes to the Bureau for the duplication of any of 2,800 titles in the "Tapes for Teaching" library. Nearly 8,500 tapes were duplicated in this way in 1965; 1,500 were auditioned and edited; and a tape catalog listing ever 2,500 titles was mailed to each school in the state.

The Bureau's audiovisual equipment was loaned 300 times to SDE educational specialists.

Production of NEM/AV materials during 1964-65 included 941 color slides, 190 transparencies, 612 pieces of art work, 1,500 tape recordings, 6,000 still photographs, 135 radio and TV spots, and a number of special 16mm reports for various agencies of the Commonwealth of Pennsylvania, including the Governor's Office. In addition to the above materials, a large number of radio and television programs were produced for Commonwealth agencies. Photo stories with color slides and overhead transparencies were also made of major events and activities sponsored by the SDE.

The Bureau also produced a sories of eight 15-minute films on the "Successful Use of the Language Laboratory", and full-length films entitled "Initial Teaching Alphabet" and "World Cultures".

Research and Development Activities :

1960-61. In 1960-61, the SDE maintained an administrative research unit which the NEM/AV unit also used for statistical and research purposes. Additionally, it had also used institutions of higher learning; regional, county, and local school districts research facilities; and private non-profit companies to assist in the collection and interpretation of NEM/AV data. Studies of several aspects of ETV were in progress.

1964-65. By 1964-65, several grants from the U.S. Office of Education had been approved for research in programmed instruction. A demonstration project on means of disseminating advancements in instructional uses of educational media was also approved by the USOE.

The SDE continued to concentrate effort on developing educational television; primary responsibility is placed with the renamed Bureau of Instructional Materials and Services.

The 1964 Pennsylvania General Assembly appropriated \$1 million to assist the SDE in establishing and operating educational tele-vision facilities and equipment and in purchasing and producing useful ETV programs. The Bureau of Instructional Materials and Service administers this grant program. Eight regional educational broadcasting councils, coordinating the efforts of educators and the community, cover the entire state.

In addition to 11 channels allocated to the state by the Federal Communications Commission, Channel 12, formerly in Delaware, was also allocated to WHYY, Philadelphia. Three new



stations (bringing the total to seven active channels in five stations) were recently established (at Hershey, The Pennsylvania State University, and Bethlehem). Thus, about 80% of the state's population is now served by ETV. Two additional stations are in the process of development. All stations are being linked into a network so that the entire state will soon be able to receive TV signals via broadcast, translators, or community antenna systems, Recently, two translators were activated to extend existing broadcast signals into remote areas formerly not reached by on-the-air signals. Work was also begun on evaluating 2500 microwave in the public schools. A new radio station was activated at Geneva College. The State Communications Coordination Committee is studying the feasibility of a state-owned or -!eased microwave network when more stations are on the air. More than 500 hours of programming are now being distributed to ETV stations, without charge, from the Department's Television Library. New programs are being purchased and/or produced.

A state plan for closed-circuit television at state colleges has been developed, and the State Board of Education has approved installation of such facilities at all state colleges at the discretion of their respective administrations. Closed-circuit television facilities have been established at five state colleges and approved for two. The Bureau also assisted in developing closed-circuit television systems for several school districts.

Regulatory Activities

1960-61. In 1960-61, accreditation standards for Pennsylania contained references to a minimum number of NEM/AV equipment items, minimum physical facilities for NEM/AV use, and to recommended experiences and training for personnel performing NEM/AV tasks. The SDE itself was in the process of developing more specific NEM/AV requirements. It was anticipated that evaluation teams from the SDE would be used to appraise the application of such standards within schools of the state. The single NEM/AV requirement in the certification procedure called for a course in "Visual and Sensory Aids" for teachers applying for a permanent certificate. No other classification of professional personnel was required to have a NEM/AV course, and no special certification existed for personnel with NEM/AV responsibilities.

School plant standards (which contained provisions for NEM/AV facilities) were recommended, rather than mandatory. Regulations for electric power supplies and outlets were considered to be adequate, but SDE NEM/AV personnel were aware of the lack of regulations for the ventilation of darkened rooms, room-darkening facilities, conduits, and storage and production space for NEM/AV materials and equipment.

Equipment standards and specifications (mandatory for both elementary and secondary schools) were developed to guide purchases of equipment under the NDEA. Other than the minimum numbers of equipment items recommended in accreditation standards, however, no other such standards were in force.



No state aid funds were specifically earmarked by local districts for NEM/AV expenditures, but they could spend state aid funds in support of NEM/AV activities.

1964-65. In 1964-65, Pennsylvania school accreditation, school plant, and equipment standards were almost identical to those of 1960-61.

In March, 1965, the State Board of Education approved a nonmandatory certificate for audiovisual education specialists. Guidelines were established. Materials were designed to assist colleges in acquiring necessary staff, equipment, facilities and resources for developing necessary courses. Arrangements for internship programs were begun. Eight state colleges indicated a desire to offer such programs. Graduate course work leading to this certificate relates to: (a) learning theory relative to audiovisual media and communications; (b) organization and operation of an audiovisual resources center; (c) fundamentals of library science; and (d) production and utilization of audiovisual materials,

As in 1960-61, there are no state education funds distributed to districts earmarked for NEM/AV purposes. However, subject to local school board authorization, state funds may be used.

Significant Changes Since 1960-61

Several important NEM/AV developments and changes which have occurred in Pennsylvania since 1960-61 have been described in the preceding sections. The three considered to be the most significant are:

- * Expansion and development of regional instructional materials centers from 15 in 1960-61 to 22 in 1964-65. These service 51 of the state's 67 counties and an estimated three-fourths of the school population. The Bureau is responsible for encouraging their formation, preparing legal agreements, giving legal approval, supervising budgets, making materials available, and other aspects of their development.
- Integrated development of closed- and open-circuit educational television broadcasting throughout the state. Three annual appropriations of about \$1,000,000 each have been made by the state legislature. Funds are now available to support a state ETV network.
- * Expansion of NEM/AV activities and services provided by the Bureau staff. These included NEM/AV experimentation, in-service education activities, and consultation on school and college facilities, building, and equipment needs.

* * * * *

Findings of the ACSSAVO Questionnaire

The ACSSAVO questionnaire obtained updated (1964-65) information on the same aspects of SDE NEM/AV programs and activities for which questionnaire data were obtained in the 1960-61 SAVES survey. The 18 categories in the ACSSAVO questionnaire were identical with those used in the original study. (Additional questions included in the ACSSAVO questionnaire are discussed later in this chapter.) Bight of the 18 categories contained more than one "yes" or "no" question or subpoints which could be checked if the answers were in the affirmative. Thus, it was possible to respond "affirmatively" to a total of 36 questions. Responses to 26 of these questions for the years 1960-61 and 1964-65 are presented in Figure 2.

Figure 2, it should be pointed out, has a number of limitations, the most important of which is that data for 1961-62 were taken from the original questionnaire and not as corrected for use in developing national patterns. Certain corrections were made by the SAVES Project staff after analysis of certain SDE documents and responses to follow-up interviews. Hence, the totals sometimes vary slightly from those reported in the discussion of national patterns. The data from the ACSSAVO questionnaire have not been further verified or modified by interviews or supporting documents.

Several other limitations should be mentioned:

- * The 1960-61 questionnaire was answered by qualified representatives in all 50 states; the 1964-65 ACSSAVO was answered by only 46 states. No replies were received from Arizona, North Dakota, Wyoming and Vermont.
- * All states did not respond to every question i. either the first or second questionnaire.
- * Only affirmative answers are reported in Figure 2. A blank (no tally) in the tabulation could thus indicate either a negative reply or a simple lack of response for the item.

Chapter 6 includes the <u>Summary Report</u> staff comments regarding questionnaire answers. Category headings used in various columns of Figure 2 should be interpreted as follows:

A. Consultation

- A 1. SDE staff normally provides consultation to local personnel on the classroom uses of NEM/AV materials.
- A ? NEM/AV staff primarily provides consultation to local personnel on the classroom uses of NEM/AV materials.

B. Curriculum

- B 1. Consideration of NEM/AV materials in curriculum planning with local personnel generally provided by the SDE staff.
- B 2. Consideration of NEM/AV materials in curriculum planning with local personnel provided by NEM/AV staff.



FIGURE 2. PROFILES OF SDE NEM/AV PROGRAMS
1960-61 and 1964-65

Category*	, <u>A</u>					В				С			<u>.</u> D	
	Ço A	nsul -1	A.	tion -2	Cu B-			ım -2		onfe -1	C.	-2	Acc	redi-
<u>State</u>	 	DE	NE	M/AV	SDI	E	nem/	/AV	NE	VA'\M		e of		tion
Year 19-	180	64	60	64		64	60	64	60	64		64	60	64
Alabama Alaska	×	x	x	ж	×	×	×	×	X	x	x	ж	x	
Arizona Arkansas California	X	x	x x	x x	X	*	x x	x x		x X	x x	ж ж	×	x x
Colorado Connecticut Delaware Florida Georgia	x	×	x x	x x x	x x	x x	1	x x x	ж х	x x x x	x x x	x x x x	x	x x x
Hawaii Idahò Illinois Indiana Iowa	x	ж	x x	x x x	x	×	x x	x x	x x x	x x x	x x x x	x x x x	x x x	x x x
Kansas Kentucky Louisiana Maine Maryland	x x x x	x x x	×	x x x	x x x	X X X X		×	x x x x	x x x	x x x x	x x x x	x x x x x	ж х х х
Massachusetts Michigan Minnesota Mississippi Missouri	x	ж ж ж	ж ж ж	x x	×	x x x	x x x	×	X X X X	x x x	X X X X	x x x x	x x x	x x x
Montana Nebraska Nevada New Hampshire New Jersey	x x x	x x x	x	ж ж	x x x x	x x	x	×	ж	x x	X X X X	x x x x	x	x

^{*} See pages 86,99 and 100 for detailed description of categories.

ERIC

Category		A			B Curriculum							D		
	Col	กรน	ltat	ion					Co	onfe	renc			
	A.	-1	A-	-2	B	L	B.	-2	C.	-1	C-		1 1	redi-
State	e.)E	MES	4 / 3 15	G D I	,	2772.14	/				of	ta	tion
Year 19-		164		1/AV 64	SDI 60	2	NEM	AV 64	NO	64	60 60	1/AV 64	60	64
				10-3	•			9.	00	0.4	00	04	60	04
New Mexico New York	X	×	ļ		X	X			Х		X	ж	×	į
North Carolina	X		×	X X	X		x	X	X X	×	X	x	×	
North Dakota	x			^	x		•	X	*	x	×	x		
Ohio		×	x			x	ж		x	x	x	ж	×	×
Oklahoma		ł	x	x		x	×		x	x	×	х	x	х
Oregon	Ì	İ	X	×	X	×		ı	x	X	x	х	x	х
Pennsylvania Rhode Island			X	x	}		X	X	Х	X	X	×	x	х
South Carolina	x		×	X	х			×	X	X	x	x		x
sogen carottue		×		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	х	X			X	ж	X	X	×	x
South Dakota	x	x				x	ж		×		x	x		
Tennessee	X			x	ж	X			x	x	X	x	x	x
Texas			x	х		X			X	X	X	х	x	x
Utah	x			×	x			x	х		x	х]	x
Vermont	X				x			i	x		×			
Virginia														
Washington	x		X	X		X	X	X	×	X	X	ж	×	x
West Virginia	X	x		^	X X	x	e .	X	x	X	x	X X	×	
Wisconsin			x	x			×	X	X	X	X	X	ų.	ж
Wyoming	x				x				ж	•	x	~	X X	X
						•			*					,
% "Yes"	,											7		
(See note)	52	41	46	65	58	57	⊹.2	46	84	74	92	98	64	63

In 1960-61, 50 questionnaires were returned, hence "yes" replies upon which percentage is based is <u>50</u> states.

In 1964-65, questionnaires were returned from 46 states, hence "yes" replies upon which percentage is based is 46 states.

States not returning ACSSAVO 1964-65 Questionnaire: Arizona, North Dakota, Vermont, and Wyoming.

Category		عد سامان		<u>E</u>		
•			Cert	ification		•
	E -			S-2 Lstrators	Æ	-3
State	Teac			rvisors		arians
Year 19-	60	64	60	64	60	64
Alabama Alaska Arizona Arkansas California	×	×		×	×	×
Colorado Connecticut Delaware Florida Georgia		x	×	×	x	X
Hawaii Idaho Illinois Indiana Iowa	×	x	x	x	x	x x x
Kansas Kentucky Louisiana Maine Maryland	×	x x		X X		
Massachusetts Michigan Minnesota Mississippi Missouri			x	x		×
Montana Nebraska Nevada New Hampshire New Jersey		×		×		
wew nersel	<u></u>	×				



Category											
			Certif	ication							
State	E-			trators	1	-3					
Year 19-	Teachers		\$uperv	180rs 64	60	rarians 64					
New Mexico New York North Carolina North Dakota Ohio		x		x x							
Oklahoma Oregon Pennsylvania Rhode Island South Carolina	×	x	•		×	x x x					
South Dakota Tenessee Texas Utah Vermont					x x	x					
Virginia Washington West Virginia Wisconsin Wyoming	x	ж			x	x x					
% "Yes" (See note)	14	24	6	22	14	28					

In 1960-61, 50 questionnaires were returned, hence "yes" replies upon which percentage is based is 50 states.

In 1964-65, 46 questionnaires were returned, hence "yes" replies upon which percentage is based is 46 states.

States not returning ACSSAVO 1964-65 Questionnaire: Arizona, North Dakota, Vermont, and Wyoming

Category				F		G					
		Nem/I	AV Re	qui re				financ	:e	-	
	C 1550	F-1	F		F-	- 1		-1	G-	2	
State	SDE	NEM/AV onnel		ding	Equip						
Year 19-	60	64	60	64	Stand	64 64	60 83 m	arked 64	<u>Gene</u> 60	<u>ral</u>	
Alabama					عين بخسطة الداسا بالد			04	00	04	
Alaska	×	×	x	x	×	x	×				
Arizona					×			×			
Arkansas		×				l j		x	X		
California	X	X	×				x	×	×	ж	
Colorado					X		x		ж	ж	
Connecticut	×	×		x		x	x		ж	X	
Delaware Florida								x	×	æ	
Georgia	X	X	X	x	×	X		X	*	X	
osoly20	X	X			X		×		×	×	
Hawaii	×	X	×	×	×	2	ж	×	×	x	
Idaho Illinois	×		X		X		×	Ş	x	×	
Indiana	X		**	X	X	X	×		×	X	
Iowa		X	X X	X X			••	X	×	×	
		36	•				*	X	X		
Kansas	X	x	X		×	1,1		Î	3 E	×	
Kentucky Louisiana									×	X	
Maine	X	X		x	*	X	*	5	*	×	
Maryland	×	X		10.00	X X	A	X	ĺ	X X	X	
					65				<i>6</i> 3.	X	
Massachusetts	X	×			*	×	×	×	×	×	
Michigan Minnesota	x		*	X			Ì	Ĩ	x	x	
Mississippi	×	X X	X	×	•	96	×	X	X	X	
Missouri	X	x	}		×	×	77	×	×	X	
					- 10- 4 , 25- 2				×	X	
Montana Nebraska							x			x	
Nevada	x	x			X		ŀ	l	_ [x	
New Hampshire	x	1					I		×	×	
New Jersey			x	×		×	x	x x	×	x	



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Category	,			G						
	Chicago and Carlot	NEM	AVR	equir	enent	8		Finance	3	
	CDE	F-1	F			-3	G-1		G-	-2
State	SDE	NEM/AV sonnel	BATT	ding	EGu1	pment		_ u =	_	
Year 19-	60	64	60	dards	60			parked		neral
قومنا جدرور كالجيز الصحارية	1	0.8	100	104	00	64	60	64	60	64
New Mexico New York			X		ж				ж	×
North Carolina		×	X	1	х		x	x	×	x
North Dakota	X			X	Ж	X		×	×	х
Ohio			X					_	X	
				X				X	X	
Oklahoma	×	×	x						1.0	
Oregon		ж		x	x	×			X X	X
Pennsylvania	X	x	X	ж	x	×	×	X	x	×
Rhode Island	X	x			x		ж		X	x
South Carolina	Calcon I		X	X	X	x	x			x
South Dakota										
Tennessee	x	×	x	x			×		X	
Texas	×	x		^			X		X	
Utah		x	x	×	X				X	X
Vermont		"	×	2.0	X	1			X X	Ж
	-						-			
Virginia	X	x	X	x			x	35		
Washington	X	**	×		X	ļ	x	x	×	ļ j
West Virginia Wisconsin	X	X	*		x				x	x
Wyoming	X	x		X	x	X	· 🗶		×	х
WY OME 119	X								X	
% "Yes"										
(See note)	58	61	48	43	54	35	48	41	84	78
				· ·					-	

In 1960-61, 50 questionnaires were returned; hence, "yes" replies upon which percentage is based is 50 states.

In 1964-65, 46 questionnaires were returned, hence, "yes" replies upon which percentage is based is <u>46</u> states.

States not returning ACSSAVO 1964-65 Questionnaire: Arizona, North Dakota, Vermont, and Wyoming.

Category	l	ä			1	»	J		
			catio		Stati	stics	Produ	ction	
State	H-			-2 ially					
Year 19-	60	64	60	64	60	1,4	60	64	
Alabama Alaska Arizona Arkansas	x x x	х		3.5	X.	æ			
California	X	X	×	ж	x	x			
Colorado Connecticut Delaware	×	x x	æ		ж ж	X X	x	*	
Florida Georgia	x	x x	X X	×	X	3 6	X	3 €	
Hawali Idaho	x	×	x x	×	*	×	*	X	
Illinois Indiana Iowa	×	x	×	X X X	X	x x x	X X		
Kansas Kentucky Louisiana	x x	x	- *	×	x	X X	×	*	
Maine Maryland	×	x x		×	×	X	X	X X	
Massachusetts Michigan Minnesota	x x	x	ж		×	×			
Mississippi Missouri	x x x	×	x x	×	×	X	X X	.	
Montana Nebraska Nevada New Hampshire New Jersey		x	Ж	×	X	·			
							<u> </u>		



<u> </u>	H			J				
		<u> </u>		Sta	tistics	Pro	duction	
				-]]		
Enti	rely	Part	<u>lally</u>	1	 			
60	04	<u> </u>	194	160	64	1 60	54	
				×	1	×	x	
x	25	涎	22	X	×	×	x	
			X	×	ж	11		
			}			1		
			X	X	X .			
			3.5				,	
	×	×		×	2		x	
x	×			x		×	X	
×	x	ļ		i				
	*	×		35	x	x		
x		×						
x	×	×	x	Ĕ	×	×	x	
	x					111	×	
						x		
X	ж			×	*		v	
	x		x	-		170	x x	
		x						
	ж	x	x	Ì	×			
X				x		ж		
52	61	42	43	48	54	42	35	
	Enti 60 x	Public H-1 Entirely 60 64 X X X X X X X X X X X X X X X X X X X	Publication H-1 H Entirely Part 60 64 60 X X X X X X X X X X X X X X X X X X X	Publication. H-1 H-2 Entirely Partially 60 64 60 64 X X X X X X X X X X X X X X X X X X X	Publication. H-1 H-2 Entirely Partially 60 64 60 64 60 X X X X X X X X X X X X X X X X X X X	Fublication. Statistics H-1 Entirely Entirely 60 64 H-2 Entirely Partially CO 64 60 64 60 64 X X X X X X X X X X X X X X X X	Publication Statistics Pro H-1 H-2 Entirely Partially 60 64 60 64 60 64 60 64 60 64 60 64 60 64 80 8	

In 1960-61, 50 questionnaires were returned, hence, "yes" replies upon which percentage is based is 50 states.

In 1964-65, 46 questionnaires were returned, hence, "yes" replies upon which percentage is based is 16 states.

States not returning ACSSAVO 1964-65 Questionnaire: Arizona, North Dak Ca, Vermont, and Wyoming.

Category	K			<u>. </u>		M		
	Distri	oution			(V	-	Programme	Learning
State			4	-1 De	1	er er		
Year 19-	60	64		64		64		64
Alabama Alaska Arizona	x x		×		x			24
Arkansas California	×	×	×	·	ж	X X	×	×
Colorado Connecticut Delaware Florida	x x x	x x x x	x	x	x	x	x x	x
Georgia	х	X	X	X		X	X.	×
Hawaii Idaho	ж	×		X			×	ж
Illinois Indiana Iowa	x x	×		×		×	ж	x x
Kansas Kentucky Louisiana Maine Maryland	x x x	x x x x	x x	x x x			×	·x x
Massachusetts Michigan Minnesota Mississippi Missouri	x x	x x	x	x	x		x x x	×
Montana Nebraska Nevada New Hampshire New Jersey	x	x x x x	x	×		•	·×	* *



Category	K				L		M		
	Distri	bution			ŢV		Programm	ed Learning	
State			9)-l De	Ot	-2 her			
Year 19-	60	5 64	<u>(50</u>	64	60	64	60	54	
New Mexico New York North Carolina North Dakota	X X	X X	×	* *	×		x x	<u>ک</u> ر	
Ohio	ж	×				, and the second	×	x	
Oklahoma Oregon Pennsylvania Rhode Island South Carolina	x	x	X	x x x x	×	x x x	, % X X X	x x x	
South Dakota Tennessee Texas Utah Vermont	X X X	x x x		x x x	×		X	×	
Virginia Washington West Virginia Wisconsin Wyoming	*	x x x	x	×	×	x x x	x x x	x x	
% "yes" (see note)	54	70	40	54	18	28	52	46	

In 1960-61, 50 questionnaires were returned, hence, "yes" replies upon which percentage is based is 50 states.

In 1964-65, 46 questionnaires were returned, hence "yes" replies upon which percentage is based is 46 states.

States not returning ACSSAVO 1964-65 Questionnaire: Arizona, North Dakota, Verment, and Wyoming.



Category		N Unit	0							
	SI	E Unit		ම්යප්ලල		AND AND PROPERTY AND ADDRESS OF THE PARTY AND				
State Year 19-		1 Specify and the second second second	Iden)-l ifiable	Es	U-2 timated				
Alabama	60	64 *	60 *	54	50	64				
Alaska Arizona Arkansas				X I	×					
California	x x	X	X X	X X						
Colorado Connecticut Delaware	×	X X X	x x	X X		35				
Florida Georgia	X	x			x	x x x				
Hawaii Idaho	×	2.0	×	*						
Illinois Indiana	×	x			x x	x x				
Lowa	X	X				X X				
Kansas Kentucky	x x	×			*	x				
Louisiana Maine	ж	X X	3 2	*	×	×				
Maryland	-					. x				
Massachusetts Michigan	×	x				* x				
Minnesota Mississippi	x x	x x		×	x	x				
Missouri	X	x			х	x				
Montana Nebraska Nevada	22	x x	×	x		x				
New Hampshire New Jersey	×	×	×	×						

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Category		N	0							
	SI	E Unit		Budget						
State			Identif		O-2 Estimated					
Year 19-	60	64	60	64	60	64				
New Mexico New York North Carolina North Dakota Ohio	ж ж х	x x	x x x	X X	x	x x				
Oklahoma Oregon Pennsylvania Rhode Island South Carolina	x x x	x x x x	x x	x x x	×	X				
South Dakota Tennessee Texas Utah Vermont	x x x	x x x	×	x		×				
Virginia Washington West Virginia Wisconsin Wyoming	x	x x	×	x	×	x x				
% "Yes" (see note)	60	78	40	41	30	46				

In 1960-61, 50 questionnaires were returned, hence, "yes" replies upon which percentage is based is 50 states.

In 1964-65, 46 questionnaires were returned, hence, "yes" replies upon which percentage is based is <u>46</u> states.

States not returning ACSSAVO 1964-65 Questionnaire: Arizona, North Dakota, Vermont, and Wyoming.

C. Conferences

- C 1. SDE conducted or sponsored conferences or workshops on NEM/AV media.
- C 2. SDE staff use NEM/AV materials in workshops and conferences.

D. Accreditation

SDE considers NEM/AV as a factor in accreditation of elementary and secondary schools.

E. Certification

- E l. 3DE certification standards for elementary and secondary school teachers contain requirements in competency in NEM/AV media.
- E 2. SDE certification standards for administrators and supervisors contain requirements in competency in NEM/AV media.
- E 3. SDE certification standards for librarians contain requirements in competency in NEM/AV media.

F. NEM/AV Requirements

- F 1. SDE has written requirements concerning degrees and experience for NEM/AV professional personnel.
- F 2. SDE has published standards concerning school building or facilities which pertain to the classroom use of NEM/AV media.
- F 3. SDE has published standards concerning specifications for NEM/AV equipment.

G. Finance

- G 1. SDE distributed to school districts funds specifically earmarked for NEM/AV programs.
- G 2. SDE distributed general-purpose funds which could be used for NEM/AV equipment and materials.

H. Publication

- H 1. SDE issued publications concerned exclusively with the NEM/AV program.
- H 2. SDE issued general publications which contained information concerning the NEM/AV program.

I. Statistics

SDE collected statistics relating to the use of NEM/AV in public elementary and secondary schools.

J. Production

SDE produced NEM/AV materials for use in public elementary and secondary schools.



K. Distribution

SDE distributed NEM/AV materials to public elementary and secondary schools.

L. ETV

- L 1. SDE has legal authority for the establishment, operation, or fulfillment of other responsibilities concerning open- or closed-circuit television within the state.
- L 2. An agency of the state government other than SDE has acquired responsibility for ETV.

M. Programmed Learning

SDE conducted activities or published materials relating to teaching machines and programmed learning.

N. SDE Unit

SDE has an administrative unit responsible for NEM/AV programs.

O. Budget

- O l. SDE has provided definable budgets for NEM/AV unit or activity.
- 0 2. SDE estimates budget for NEM/AV unit or units.

For purposes of brevity "60" is used in Figure 2 to refer to the calendar or school year 1960-61, and "64" for the calendar or school year 1964-65.

Significant Changes in NEM/AV Activities Since 1960-61 As Reported by State Respondents in 1965

Item 20 of the ACSSAVO questionnaire asked: "In your opinion what significant changes have occurred in your SDE NEM/AV operation since 1960-61?" (Please describe.) One hundred and twelve

responses describing changes considered to be significant were reported by 38 states. These were grouped roughly into broad categories; they are reported under the functional headings of NEM/AV activities used elsewhere in this Summary Report. As might have been expected, many of these informal replies could be classified in several ways. The Summary Report staff has arbitrarily placed the response in whatever category seemed to be most appropriate. Sometimes, they have also used illustrations drawn from the various replies which seemed best to reinforce or illustrate a named "significant change". Although the five states whose programs are described earlier in this chapter also reported "significant changes", they are not used here as examples for obvious reasons.



Three numbered spaces were provided for answering this question. Eight states said no significant change had taken place; three states indicated one such change; six, two changes; 26, three changes; one, four changes; and two, five significant changes.

The "significant changes" since 1960-61 reported by 38 respondents follow:

Organization and Finance

Creation of a separate NEM/AV administrative unit and/or appointment of NEM/AV designated personnel. (6 states)

Example: Utah--"formation of new Division of Instructional Media in September, 1965. Includes the employment of a Division Director, Library and AV specialists, as well as back-up personnel."

Additions to NEM/AV professional staff. (12 states)

Examples: Florida--"The graphic artist and AV technicians have been added to the department." Georgia--"Additional position has been created--Consultant for Teaching Media."

Expanded budget for NEM/AV activities in SDE. (2 states)

Leadership Activities

Better awareness of the values of and greatez respect for NEM/AV activities and services by SDE personnel (and in one instance, the public). (7 states)

Examples: Arkansas--"More awareness on part of the administration of value of AV materials." Iowa--"Complete department acceptance of new media in schools."

Improved status of NEM/AV as a field of educational activity; NEM/AV personnel work in closer relationship with curriculum and other SDE activities. (3 states)

Example: Oregon--"Development now under way of regional curriculum council, the operation of which will focus attention on 'how to' (with all media emphasis) as well as 'what' and 'when' of curriculum."

Increased attendance and participation of NEM/AV staff members in workshops, conferences and so on, and training in the use of new media. (2 states)

Wider use of NEM/AV resources by SDE personnel. (7 states)

Examples: Florida -- "All staff members use NEM/AV as a normal procedure in making presentations." Maryland -- "Increased use of new media by staff."

Change in emphasis from a film distribution, technical or just "visual aids" service to professional leadership on a broader basis of NEM/AV activities. (3 states)

NEM/AV publications produced. (3 states)

Example: Minnesota -- "The department has published an Administrative Manual for Minnesota Public Schools which lists the qualifications and duties of AV personnel, types of AV equipment and materials, and building facilities which are recommended as essential to good instruction."



Increased activity and emphasis on ETV. Improvement in its development. (10 states)

Examples: Alabama--"Steady increase in number of ETVusing schools since 1960 and more general acceptance of ETV
programs by schools as part of their instructional programs."
Georgia--"Expansion of TV production and broadcast potential."
Michigan--"Reactivation of the State Educational Television
Committee." Oklahoma--"Supervision of ETV from the standpoint
of standards of accreditation and utilization." Maine-"Construction of statewide ETV network." Tenessee-"Expansion of state educational television broadcast
facilities." (See also descriptions of activities in the
five states described earlier in this chapter.)

Greater demand for NEM/AV services and for participation of NEM/AV personnel in a variety of educational activities. (4 states)

Examples: Arkansas--"Greater demand for conferences and workshops in utilization of AV materials." Kansas--"Inservice requests from schools of the state increased fourfold." Rhode Island--"More requests are received for consultant services on selection and utilization."

Expansion and improvement of service--workshops, demonstrations, development of local and regional centers, closed- and open-circuit ETV and so on. (7 states)

Examples: Colorado--"Educational Technology Dissemination Project Consultant with mobile van made presentations, ran workshops and offered consultant services." Maine-"Extension of services through increased appropriations."
Virginia--"Upgrading of total program in the state."

Expansion of NEM/AV use in schools—through cooperative arrangements among districts, development of centers, more materials, and promotion of newer media. (4 states)

Examples: Colorado--"Use of state film collection tripled between 1961 and 1965. Ninety per cent of increase was in school use of films for enrichment purposes..." New Jersey--"Much more equipment in schools resulting in more requests for help with utilization techniques." South Carolina--"Tremendous increase in the purchase and use of the newer media by the local schools."

Better utilization of NEM/AV materials in schools. (5 states)

Example: Louisiana--"Greater interest in proper utilization on the part of teachers in the state."

Operational Services and Activities

Increased availability of all kinds of NEM/AV equipment. (5 states) Expansion of NEM/AV materials in libraries in the public schools. (3 states)

Expansion of regional NEM/AV service centers with increases in numbers of AV personnel. (3 states)



Increase in the size of the state film library. (1 state)
Increased use of films from state library. (2 states)
Establishment of film library in SDE for distribution of free films to elementary schools. (1 state)

Research and Development Activities

NEM/AV survey of school districts initiated. (1 state)

Regulatory Activities

Standard of NEM/AV equipment upgraded. (1 state)

NEM/AV certification requirements and standards of competence upgraded. (1 state)

Example: Minnesota--"Mandatory certification of all persons holding positions of AV director or coordinator in public schools. The department reviews the qualifications and checks certification. Establishment of AV Advisory Committee to the State Board of Education. They are setting standards of competence for AV personnel and standards for teacher training."

NDEA Influence on NEM/AV Activities in SDE

The ACSSAVO questionnaire also included three questions regarding the influence of NDEA on NEWAV activities in state departments of education. The three questions were as follows:

- * First, "If your SDE had no administrative unit responsible for NEM/AY activities prior to NDEA, has such a unit been established as a result of NDEA?" Twelve states (Alaska, Indiana, Colorado, Kansas, Missouri, Nebraska, Oregon, South Carolina, Tennessee, Washington, West Virginia, and Wisconsin) answered this question in the affirmative.
- Second, "Mas the SDE NEM/AV program been expanded as a result of the operation of NDEA?" Thirty-six states (Alabama, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New York, New Mexico, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Washington, West Virginia, and Wisconsin) answered this question affirmatively.
- * Third, "Exclusive of NDEA matching funds, have additional state monies been allocated to the SDE for NEM/AV purposes as a result of the operation of NDEA?" Sixteen states (Alaska, Arkansas, Connecticut, Florida, Hawaii, Illinois, Iowa, Louisiana, Minnesota, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, and Texas) answered this question affirmatively.



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Chapter 5

STATE LAWS PERTAINING TO NEM/AV ACTIVITIES

Concurrently with the <u>SAVES Project</u> (completed January, 1963) a separate investigation was undertaken to determine the character of various state laws pertaining to <u>audiovisual</u> media and to the establishment of educational television stations. This latter study¹ (completed July, 1962) had as its controlling purpose the

A study in three volumes (State Laws on Audio-Visual Media of Instruction in Public Schools and on Establishment of Educational Television Stations), conducted by John W. Connelly, Jr., under an NDEA contract OE-2-16-003, Office of Education, U. S. Department of Health, Education, and Welfare, Washington, D. C., 1962. (Often called the Connelly Study or Connelly Report.) See Preface on how the Connelly Report was summarized.

finding of legal authority that affected or might affect "increased or improved use of audiovisual instructional media." The study

2 Ibid., Chapter I, p. 12.

itself sought to determine instances of legal authority specific to uses of audiovisual media in elementary and secondary schools as well as references of general or related types that might be invoked in the absence of more specific authority and that might affect negatively or positively the classroom use of these media.

To achieve this purpose, several procedures were followed:

- * All pertinent laws of each state were first examined to identify officials and agencies within state and local government whose decisions under such authority could conceivably affect NEM/AV use.
- * Statutes, regulations having the force of law, as well as court decisions, were examined for legal authority, specific or implied, relevant to NEM/AV3 matters.

Inasmuch as there is a lack of uniformity in the laws of the 50 states, in form and substance as well as in the distribution of legal authority for the conduct of activities to which these laws apply, it was believed to be important to find some means to



Ibid. Chapter I, p. 2. NEL/AV media were generally defined in the legal study, to include charts, exhibits, filmstrips, flat pictures, maps and globes, models, posters, radio programs, recordings, slides, television programs, teaching machine programs, and other non-book instructional materials.

^{*} Laws of the 50 states were analyzed to ascertain legal authority to establish and operate educational relevision stations. (Amended to the original contract.)

report the study of such laws so that the result would be more than a mere collection of legal citations for each state. To achieve this end, a special classification plan was developed that facilitated the interpretation of and reference to a vast amount of legal material. This plan also provided a means of demonstrating how legislative and educational authorities in each state had solved, or were placed in a position to solve, particular problems related to the classroom use of audiovisual instructional media.

The classification scheme finally adopted consisted of 22 functional categories that identified typical, but general, NEM/AV activities and services. These categories then served as constants to which the variables--legal authorizations (expressed and implied) -- could be related and compared. The categories themselves represented the full range of activities found to be common to most NBM/AV programs concerned with "selecting, acquiring, financing, and distributing audiovisual media of instruction; regulating the use of them; gathering statistics on their use; organizing special units to facilitate and promote their use; advising users on selection and use; providing for special skills of users through a system of teacher certification and requirements of qualification for employment; and enforcing the use of them through a system of accrediting schools on the basis of their observing requirements for a minimum supply and use of such instructional media."4

4 Connelly Report, Chapter I, p. 14.

Categories used in the legal study are similar to but not identical with the categories of NEM/AV activities treated in the SAVES Study questionnaire. It should also, be remembered that the SAVES Study focused primarily on the NEM/AV activities of state departments of education while the study of state laws relating to NEM/AV uses included laws applicable to any governmental unit concerned with public education—not just those applicable to state departments of education. Thus, the laws or regulations might relate to local authority or local operations, to statewide policy, to higher education, or to the specific functions of state departments of education.

The legal study itself was conducted by a full-time principal investigator and two part-time assistants. Begun in August, 1961, and completed in July, 1962, the study was reported in three volumes. Two of these volumes (Volume I, 785 pages, and II, 316

pages) contain findings and discussions of the specific and general laws of each state that pertain to audiovisual instructional media for classroom use, as well as descriptions of the organizational structure and some background statistical information on public education. These data are presented in a standard format based



It is anticipated that the <u>Connelly Report</u> may be obtained on microfilm from the USOE. (Write Dissemination Branch, USOE)

on the categories described above. The third volume 6 (566 pages),

Chapter headings for the last volume, the final report, are:
Chapter I, Introduction: Problem, Approach, Method of Presentation: Chapter II, Organization and Background Information:
Chapter III, Summary of State Legislation Dealing Specifically with Audiovisual Aids: Chapter IV, Summary of State Legal
Authority to Establish and Operate Educational Television Stations:
Chapter V, Summary of Laws and Regulations According to Functions,
Relevant to the Use of Audiovisual Instructional Media in Elementary and Secondary Public Schools: and Chapter VI, Conclusion.

the final report of the study, is a summary and digest of the various separate state reports and a refinement of legal material gathered in the survey.

Distribution of Power in the Educational Structure

Within each body of school law are the enactments that set patterns for the distribution of power to organizations, officials, and agencies within each state. How and to whom this power is

Organizational and background information for each state is summarized in Chapter II of this study by John W. Connelly, Jr.

distributed is to some extent a key to determine control points of decision making for education. In New York State, for example, the state education department is seen to be a component of an interlocking organizational complex having sweeping authority-perhaps more than any other educational agency in the country-that permits direction of all significant aspects of the state's educational program. Idaho has made similar large grants of power to the State Board of Education and expressed restrictions on the powers of local boards. There, a "residuary! provision invests the state board with all powers not otherwise granted to organizations or officials. In other states, in contrast, the emphasis is almost the reverse. In most New England states, for example, the traditional emphasis has been on local self-government and control of education. There, less power is vested in the state boards. In Texas, on the other hand, a statute provides that all powers not specifically granted to organizations and officials at the state level are reserved to and shall be exercised by local boards, which are defined to be operational. Four states are without state boards of education; instead they have only a chief state school officer with a staff which functions as his "office" and corresponds to a department of education. should be obvious that such variations in the distribution of powers and duties can and do affect every aspect of the educational program including, of course, the development and operation of NEM/AV activities and services.



School Laws in General

School laws providing for the operation of an effective public school system touch upon all the laws of a state, comprising a separate "universe" within the laws for that state. There is considerable diversity and variety in the school laws of all 50 states. In some states, for example, the school laws have been drafted in broad terms; they are seen to be flexible in scope, leaving much to administrative discretion. In others, on the other hand, separate education codes compiled from laws (supplemented by rules and regulations having the effect of laws) apply specifically to school operations. In Connecticut, for instance, the school code contains less than 150 pages of statutes and grants only general powers; in California, in contrast, the educational code requires more than 1500 pages (encompassing some 20,000 different sections) and deals specifically with a great range of educational activities. As might be expected, however, there are many gradations of specificity, detail, and length between these two extreme examples.

No matter what the size or scope of school laws, it must be assumed that they represent laws that state legislatures consider to be necessary and effective for operating the educational establishment.

Legal Authority to Deal with Audiovisual Media (1962)

The authority or powers granted by each state to organizations within the educational structure to operate its public schools were examined in the Connelly Study to determine which had been granted expressly and which were only implied from general grants to deal with audiovisual media of instruction. Lack of an authority citation does not mean that no such authority exists; rather, it may mean that the state legislature concerned had either considered the authority already granted to be adequate for such activity, or that it had not considered the activity necessary to achieve effective operation of the school system.

Expressed Authority. To summarize the legal references giving expressed authority to deal with different audiovisual materials, the Connelly Study identifies as basic such items as charts, exhibits, flat pictures, maps, globes, models, and posters, all in common use in the schools. A second class adopted for convenient description is films, which includes other related items, such as filmstrips and slides. A third class is audiovisual, a generic term used in legislation to include tape and other sound recordings as well as other materials items just mentioned. The fourth class is television, which includes various kinds of legislation on this subject as well as a few statutory references to radio and radio instruction.

States with No NEM/AV Legislation. Legislatures of twelve states have taken no action to provide specific legislation relating to audiovisual media. These are: Alaska, Colorado, Idaho, Kentucky, Maine, Michigan, Minnesota, Nebraska, Nevada, New Mexico, Texas, and Wyoming. Nevertheless, there is evidence



(as the individual state reports in the <u>SAVES Study</u>, Chapter III, <u>SAVES Report</u>, show) in most of these states audiovisual media are not only used in the schools but that the SDE itself assumed at least some responsibilities for NEM/AV activities. In Alaska, for example, one state department supervisor was shown to have spent part-time in 1960-61 on NEM/AV matters, a small estimated budget was provided for salaries and expenses, state funds distributed on a per capita basis for specified purposes included \$.50 per child in grades 1-8 and \$1.00 per child in grades 9-12 for audiovisual materials, and a small state-supported instructional materials center distributed films to schools throughout the area.

That most of the states without specific legislation have active NEM/AV programs is also evidenced by <u>SAVES Report</u> data showing the number of SDE-sponsored meetings related to NEM/AV matters, SDE publications in the field, the existence of SDE-supported film libraries, and the assignment of SDE personnel having NEM/AV responsibilities.

States with Legislation for Basic Materials. In nine states, legislatures have provided legislation concerning only some form of simple basic types of media: Arizona, Delaware, Georgia, Iowa, Kansas, Missouri, Washington, West Virginia, Wisconsin. In these instances, legal references authorize local procurement of maps, globes, charts, and "apparatus". Variously, some are authorized to procure "teaching aids" (Arizona), "teaching materials and aids" (Georgia), and "other instructional materials" (Kansas). The extent to which such minimum legislation has affected the development of NEM/AV programs in these states is unknown, but there is ample evidence that in these same states there is considerable SDE activity in NEM/AV matters. Georgia, for example, has a Director of Audio-Visual Services and a Television Director. In 1960-61, at least 10 persons spent fulltime on NEM/AV work. The estimated SDE budget for NEM/AV activities that same year was \$481,824; and for 1964-65, expenditures of more than \$1,600,000 were reported. The state owns and operates four film libraries and one tape library, provides a program of audiovisual matching funds, is active in ETV, and produces audiovisual materials.

It would appear that states having only legislation on basic types of equipment are in about the same position as states having no legislation. Authority to deal only with these items gives only frail support to an implication of authority to deal with films and television. In such states, therefore, implied authority to deal with more sophisticated types of equipment rests more on grants of powers to deal with "school supplies", "teaching equipment", "instructional materials", "other necessary supplies", or similar reference expressions. These same general expressions also provide the basis of implied authority to deal with audiovisual aids in states lacking specific legislation.

States with Legislation Specifying "Audiovisual". In four states, legislatures have provided legislation relating only to "audio-visual" but none with respect to particular types: Hawaii, Maryland, Mississippi, and Utah. Hawaii made appropriations for



an "audio-visual center" at the University of Hawaii and for "audio-visual education" in the public schools; Maryland authorized the state superintendent of schools to procure "visual and auditory aids" for those schools under supervision of the state board and by county boards for schools under their supervision; Mississippi established an office of "Supervisor of Audio-Visual Education" in the SDE; and Utah directed the state superintendent to prepare "visual education aids" for incorporation in appropriate courses of study.

States with Two Classes of Materials Specified in Law.

Legislatures in two states have provided for simple basic types of media as well as for the class of audiovisual aids, but nothing else. New Jersey, in addition to permitting local boards to procure basic types of materials, provides for the voluntary establishment and local and state support of county educational audiovisual aid centers. In South Dakota, on the other hand, county superintendents are directed to procure "audio-visual equipment and supplies" (in addition to other "basic" materials) for the county library and to make them available to schools. School boards of independent districts are also required to spend minimum amounts for "audio-visual equipment".

States with Laws Only for ETV. In seven states, legislatures have provided legislation relating only to educational television and to no other audiovisual media forms. These states are: Alabama, Arkansas, Florida, Illinois, Louisiana, Oregon, and Rhode Island. It should be noted, however, that at least six of these seven states have developed NEM/AV programs and have a record of providing active leadership at the state level.

States with Laws Relating to More than Two Types of Audiovisual Media. In the remaining sixteen states, legislatures have provided legislation relating to two or more of the four types of audiovisual media (used here as classes) basic, films, television, and audiovisual in general. Figure 1 identifies classes of audiovisual media legislation provided in these states.

States with Regulations Dealing with Audiovisual Media. states provide regulations dealing specifically with one or more types of audiovisual media. (See Figure 2.) These regulations, issued in the exercise of power granted by the legislatures, have the force of law. The states concerned are: California, Kansas, Minnescta, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Virginia, and Washington. In Kansas and Washington, such regulations relate primarily to accreditation standards; in Kansas they refer specifically to basic, film, and audiovisual media; in Washington, they refer to audiovisual media and tele-In four states (Minnesota, North Dakota, Oklahoma, and Tennessee) references are made to minimum standards for equipment and/or materials. In Minnesota, these standards refer also to minimum training for NEM/AV personnel. Regulations in the remaining four states of this group authorized or restricted expenditures for materials and/or equipment as the following summaries illustrate:



FIGURE 1. STATE LAWS PERTAINING TO NEW/AV MEDIA

—	State	Basic	Films	· TV	General
1.	California	x	×	×	×
2.	Connecticut	×	×		x
3.	Indiana	×		×	×
4.	Massachusetts	×		×	x
5.	Montana	×	x		x
6.	New Hampshire	×		×	X
7.	New York	×	x	x'	x
8.	North Carolina	ж		×	·
9.	North Dakota	×		x	·
10.	Ohio	×	ж	X	×
11.	Oklahoma	.x	x	×	
12.	Pennsylvania	x .	x	x	x
13.	South Carolina		x		x
14.	Tennessee		×		X
15。	Vermont		×	x	×
16.	Virginia	×	x	x	
		13	11	12	12

FIGURE 2. STATE REGULATIONS GOVERNING NEM/AV MEDIA

State	Basic	Films	·· TV	Genera!
California	×	×	×	ж
Kansas	×	×		×
Minnesota	×	×		X
North Dakota	×			
Oklahoma	×	×	×	×
South Carolina		×	,	×
South Dakota	·			×
Tennessee	x	×		×
Virginia	×	×		x
Washington			x	×
	7	7	3	9

- * California: Restricts purchases of materials and films and filmstrips to those "adopted" by county boards; restricts purchases of equipment by county boards except for use by staff to provide "audiovisual services" or for loan to schools, and the like.
- * South Carolina: Spe ifies standard lists of equipment to be purchased by school districts; many materials and other items are also specified in other lists.
- * <u>Virginia</u>: Authorizes expenditures of state library funds on a matching basis to be used in purchasing certain AV equipment and materials.
- * Washington: Requires use of local funds in purchasing "Visual aid equipment" and, as noted above, provides extra credit in accreditation standards for schools offering special services in audiovisual and television media.

Implied Authority to Deal with NEM/AV Matters

As previously indicated, the <u>Connelly Report</u> showed that some states are without <u>specific legislation</u> related to NEM/AV use; others have specific legislation referring to the uses of certain types of materials and equipment. However, all states have <u>general laws</u> capable of affecting negatively or positively the use of <u>NEM/AV</u> materials and equipment in the school program. When a legislature does not enact new laws to provide specifically for the use of <u>NEM/AV</u>, it would seem reasonable to assume it is satisfied that <u>general authority</u> already granted to schools is sufficiently broad to permit proper <u>NEM/AV</u> activities simply on the basis of <u>implied authority</u>. A statute authorizing or directing a school board to provide schools with textbooks and "other materials necessary for instruction", for example, might well be given this interpretation.

A major portion of the Connelly Study was concerned with analyses of general laws that might be implied or invoked for the conduct of various NEM/AV activities connected with classroom uses of audiovisual instructional materials. In doing this, the investigator arbitrarily selected as headings 22 major categories of NEM/AV activities for which appropriate legal authority could be reported somewhat uniformly and conveniently. General laws were cited if they contained general provisions which reasonably and probably could be interpreted as being relevant to a particular category of NEM/AV activities. The Connelly categories,



It should be emphasized that such general laws are subject to legal interpretation in each state as well as within its subunits. Obviously, it would have been not only impractical, but very nearly impossible, to obtain interpretations of them by legal authorities of every state. Therefore, the legal citations and references to statutes and regulations in this study are those selected and interpreted by one person. As such, of course, they may be questioned or challenged by legal authorities of individual states.

resembling those used to identify NEM/AV activities reported in the SAVES Study, included the following: planning, preparing curricula, advising, organizing, conferring outside, selecting, acquiring, financing, regulatory uses, distributing, producing, certificating teachers, prescribing qualifications, accrediting schools, building schools, research programs, and institutes.

Categories not listed here are considered to be inapplicable to this Summary Report.

As expected, categories under which laws were cited were conceived to have broad meaning as illustrated in the following examples: 10

10 Chapter V of the legal study, pages 16-18 explains all categories used.

- * Planning--Planning at any level for use of audiovisual media.
- * Preparing curricula -- Preparing curricula, either on the basis of minimum requirements or in elaboration of details, in such a way as to include the use of such media.
- * Conferring outside—Conferring (usually by top—level officials) with individuals or organizations outside the education hierarchy to promote classroom use of such audiovisual media.
- * <u>Selecting</u>--Selecting such media, with indication of controls used through medium of requirements, official "adoption", or with freedom of choice.

Examples of general or implied authority to conduct NEM/AV activities illustrate the nature of such laws and their possible application:

- * Example 1: Preparing Curricula (Alabama). Secs. 17 and 403 (Title 52, Code of Alabama 1958) direct the State Board of Education on recommendation of the State Superintendent, to prescribe minimum contents of school courses. Authority to include new media appears to be implied. Section 407 directs the Committee on Courses of Study to recommend courses for all schools. Authority to include new media is also implied. Section 87 directs county boards, on recommendation of county superintendents of schools, to prescribe courses of study. Again, authority to include new media is implied.
- * Example 2: Organizing (Arizona). General po ers of the Arizona State Board of Education (Sec. 102, Title 15, Arizona Revised Statutes, 1960 as amended in 1931) implies authority to organize special units for see of new media.
- * Example 3: Conferring Outside (Colorado). Through Sec. 123-1-5 (School Laws of the State of Coloraco, 1956; as



amended in 1961) the Colorado State Board of Education is vested with powers and duties necessary to carry out general supervision of the schools, implying also authority necessary to confer respecting new media. Sec. 123-1-7, of the same laws, authorizes and directs the State Commissioner of Education to act as executive officer of the State Board in carrying out its policies, thus implying authority to confer outside the school system concerning new media.

Example 4: Regulating (Georgia). By Sec. 32-408 (Georgia School Laws, Title 32 as amended in 1961) the Georgia State Board of Education is directed to provide rules and regulations for the supervision of all public schools. This statement could be interpreted as including expressed authority to regulate the use of new media, including reporting and keeping of statistics with regard to them. Sec. 32-515 of these same laws gives the State Superintendent of Public Instruction the right to require reports of county superintendents and presidents of independent school systems, and includes the implied authority to require reports and statistics on uses of new media.

This portion of the <u>Connelly Study</u> thus emphasizes that broadly stated school laws seem to have the advantage of being adaptable to changing conditions and circumstances since they can be construed by the courts as applying to a variety of situations.

Educational Television and the Establishment of ETV Stations

At the time of the Connelly investigation (1961-62) few states had legislation dealing specifically with educational television. There was only limited legislation with expressed provisions pertaining to the establishment and operation of

Pennsylvania, and Rhode Island.

ETV stations. Thus, in most states, it was necessary to analyze the general powers of educational organizations to determine the kinds of implied authority that could be exercised in establishing or operating ETV stations.

Analysis showed that the role of leadership in educational activities customarily assigned to organizations and officials at the state level does not necessarily imply authority to take a definitive lead in the introduction of educational television into the public school system, or at least (with but few exceptions) it has not led to such action. For this reason, and because the



study of legal authority to establish and operate educational television stations involved many questions entirely different from those connected with legal authority for use of audiovisual media (including television) in the schools, the subject was treated separately in the report.

At the time of the study (1962), 274 channels had been reserved in the 50 states, 65 stations were in operation, and 6

In addition, there were five commercial stations licensed to educational institutions. These five were omitted in the analysis of legal authority for BTV.

stations in 5 states had been licensed but had not yet commenced operations. The owners of stations for which operating licenses had been granted (in 1962 and updated for 1965)13 were classified

13Updated information (not in the <u>Connelly Study</u>) was drawn from <u>Educational AM and FM Radio and Educational Television Stations</u> by <u>State and City. USOE</u>, Department of Health, <u>Education</u>, and <u>Welfare</u>. Washington, D. C., July 1965. These were placed in the classes used in the <u>Connelly Report</u>.

as shown in Figure 3.

The variety of organizations under which educational television is being developed and the fact that in 1962 thirteen of 31 states with ETV activity (21 out of 34 states in 1965) showed that more than one class of organization evened ETV stations.

To qualify for an ETV license, each organization must satisfy the Federal Communications Commission that it is (1) a non-profit organization, and (2) responsible financially and subject to claim and suit by creditors in its respective jurisdiction.

These facts indicate that different kinds of legal entities have been employed as vehicles to establish and operate educational television stations.

The classes of organization indicated in classes 8 to 12 are in many respects similar. They are governed in organization, operation, and fiscal responsibility by basic laws of their respective communities, for example, and are thus like other organizations carrying on non-profit activities. Corporate charters, or articles of association, provide their legal authority to establish and operate ETV stations.

The legal authority to establish and operate ETV stations for classes 1 to 7, with two exceptions (both privately owned colleges not discussed here), relate to organizations governed by public laws prescribing their duties and powers in relation to state and community interests. As a sovereign, the state is capable of exercising power not granted (or prohibited by the Constitution) to the Federal government. Thus, the state



FIGURE 3. AGENCIES OR ORGANIZATIONS OWNING ETV STATIONS

Class	Agencies or Organizations Owning ETV Sta	ations 1962	1965
1	State or Special State Agency Alabama Oklahoma Tota	4 2 6	5 - <u>2</u> 7
2	State and State Board of Higher Education Oregon Total	. 2	2
3	State Board of Education Georgia Tota	als $\frac{2}{2}$	3
4	State Department of Education Louisiana Puerto Rico Tota	ls I	<u>2</u> 3
5.	Local Boards of Education or School Dist California Colorado Florida Georgia Towa Missouri New Mexico North Carolina New York Ohio Oklahoma Tennessee Texas Utah Washington Tota	ricts l l l l l l l l l l l l l l l l l l	1 1 2 1 1 1 1 1 2 3
6.	Local Board of Adult Education Wisconsin Tota	ls I	_2_2

Figure 3. Agencies or Organizations Owning ETV Stations (continued)

Class	Agencies or Organizations Owning BTV Stations	1962	1965
7	Universities, Colleges, or Bodies Representing Them Arizona California Florida Georgia Illinois Iowa Maine	1962 2 1 2 1 2	1965 2 2 2 1 2 1 2
	Michigan Missouri Nebraska New Hampshire New Mexico (joint ownership) North Carolina Ohio Pennsylvania South Dakota Texas Utah Washington Wisconsin	1 1 1 2 1 2 1 215	1 1 1 1 3 1 3 2 1 32 2
8	Public Library Kentucky Totals	1	1
9	Non-official Councils or Commissions Missouri Pennsylvania South Carolina Texas Totals	1 2	1 1 2 1 5
10	Foundations Louisiana Massachusetts Michigan Ohio Tennessee Texas Totals	1 1 2 1 7	1 1 2 1 1

Figure 3. Agencies or Organizations Owning ETV Stations (continued)

Class	Agencies or Organizations Owning ETV Stations	1962	1965
11	Associations California District of Columbia Illinois North Dakota Ohio Virginia Totals	1 1 4	3 1 2 1 1 1 9
12	Corporations California Connecticut Delaware Florida Maine Minnesota New Jersey New York Pennsylvania Virginia Totals	1 2 1 1 2	1 1 3 1 3 4 1 19

Total 1962

65
commercial licensed (not reported)

Total 70

Total 1965

109 includes 13 stations on non-reserved channels (reported)

Total 1965

(subject to constitutional restrictions) is supreme within its own boundaries; it can authorize any state agency to establish, own, and operate an educational television station. Each state can also own property and through its legislature can enact laws governing its acquisition, use, and disposal. The ruling that such property must be used for the purposes and in the manner determined by the legislature applies not only to plant, equipment and other property but to money received from state appropriations and from local taxation as well.

Other than its form, there is little that is unique about an ETV station. It is a highly technical, electronic apparatus restricted in its use to communications of an educational nature. As such, it represents only an addition to the many other tools currently used for instruction.

The establishment and operation of an ETV station require not only availability of a teaching staff to prepare communications but money for costs of construction, operation, and staffing. Laws governing teachers in other educational establishments seem also to provide sufficient authorization for them to teach via television. Authority to spend money and to perform acts connected with constructing, maintaining, and operating ETV stations is found primarily in school laws on education enacted by legislatures to govern activities of agencies created and regulated to carry out a necessary function (education) for the states.

Laws relating to state colleges and universities are also stated in general terms that provide general powers under which to establish and operate ETV stations.

Class 2 and Class 6 organizations (a state board of higher education and a local board of adult education) are subject to similar legislative regulations that govern other public organizations or agencies created to accomplish certain educational purposes.

Similarly agencies in Classes 1, 3, 4, and 5 are authorized to establish and operate ETV stations. The Connelly Study analyzed legislation to determine specific references to authority to establish stations and to grants of power so general as to suggest that they could serve as authority for these purposes. Examples of legal authority (1962) for Classes 1, 3, 4, and 5, expressed and implied, to establish and operate ETV stations follow:

Example of Class 1, State or Special State Agency

Alabama: Code of Alabama. Recompiled 1958, Title 52.

By Sec. 627, the Alabama Educational Television Commission was established to fulfill a special function for the state. Sec. 631 directs it to control and supervise the use of all educational channels, and authorizes it to designate the location of stations and to make regulations for their operation and for programs conthem. The same section authorizes it to own stations (implying power to buy or construct), to operate them.



or to contract with others to operate them. Sec. 632 authorizes it to execute all necessary contracts and to accept gifts or grants from any source. The state board of education might have authority, under its general control powers, Sec. 14, to participate in a contract on behalf of the state department of education (which executes policies, Sec. 3) to operate a station for the Commission and for the benefit of the public schools. If a county board attempts to enter such a contract, under its control powers of Sec. 62 and contracting powers of Sec. 99, it would have to be with approval of the state board, Sec. 14. (The same would be true of a city board if it sought an operating contract.)

* Example of Class 3, State Board of Education

Georgia: Georgia School Laws. Title 32, as amended in 1961. At the time of this legal study, there was no express authority for a state board of education to establish and operate ETV stations. The exact source of such authority is uncertain but it may be implied from Section II of Article VIII of the 1945 Constitution which provides that it "shall have such powers and duties as provided by law and existing at the time of the adoption of this Constitution, with such further powers and duties as may be hereafter provided by law." It may also be implied from Section 32-401 of the School Laws which contains the same provision as above. Sec. 32-408 also says, "The State Board shall provide rules and regulations for the supervision of all public schools of this State.....they shall make such rules and regulations as may be necessary for the operation of the common schools and for the administration of the common school fund." Another grant of power may be implied from a section (Sec. 32-413) which authorizes the state board to accept grants from the Federal government and other sources and empowers the board to administer these for the benefit of the common school system, and to acquire equipment and supplies and use funds to the benefit of the State of Georgia.

* Example of Class 4, State Department of Education

Louisiana: Louisiana Statutes, as amended in 1961.

Sec. 2501 creates a Louisiana Educational Television
Commission, the membership of which includes two representatives from the State Board of Education and State
Department of Education. Sec. 2505 describes its powers
which are largely policymaking, promotional, informational,
and advisory, although it may accept gifts and grants for
the development of television. Sec. 2507 authorizes the
Commission to appoint a full-time coordinator or executive
secretary and prescribes his duties. Sec. 2751 empowers
the State Board of Education, the Louisiana State University Board of Supervisors, and the State Department of
Education, through the State Superintendent of Education,
to establish and maintain ETV facilities. This is express



authority, and evidently the authority under which the SDE applied for and obtained a license to construct and operate an ETV station.

* Example of Class 5, Local Boards of Education

Florida: Florida School Laws. 1961. Sec. 246.03 established the Florida Educational Television Commission which operates under the control and supervision of the State Board of Education, Sec. 246.05. It is authorized to establish a television network connecting communities with stat! ns as determined by the State Board of Education. This network is intended primarily for instruction of students at junior colleges and universities, Sec. 246.08. The Commission is authorized to advise, consult with and cooperate with local educational agencies in making surveys on this Sec. 246.11. The County board of education under Sec. 230.03 is responsible for the organization and control of public schools of the county. The board is a corporation, Sec. 230.21. Under Sec. 230.22, it has powers to determine policies, make contracts, and perform duties and other activities it may find necessary for improvement of the county school system. Other duties and powers are described in Sec. 230.23 which include power to control and administer property and money given to the schools, adopt school programs and make surveys for annual and long-range planning and so on. several sections provide ample justification for implying authority to establish and operate an educational television station.

Summary and Comments

The study of State Laws on Audiovisual Media of Instruction in Public Schools and on Establishment of Educational Television Stations (John W. Connelly, Jr.), distilled from a vast amount of material, sought to examine legal authority affecting the classroom use of audiovisual materials and equipment, including those involved with establishing and operating educational television stations. Material was recorded, assembled, and classified in several ways, as described and illustrated in this chapter. parallel comparison of data was facilitated by reporting and discussing the legal findings in a uniform format with respect to the organization of the educational establishment, specific legal authority for audiovisual media, and a categorized classification of authority (expressed or implied) relevant to the conduct of NEM/AV activities and services. (The establishment of ETV stations was treated separately.) It was pointed out here that direct comparisons of school legislation among the several states were difficult to make and that it would be unwise to attempt to import legislation from one state to another or to generalize about such laws in the country as a whole, Rather, school laws of each state must be considered in the context of the educational structure for that state, the intent of the legislature in granting broad or specific powers, and interpre-



tations of such laws by appropriate legal authorities.

Several other observations and comments seem pertinent:

- * There is much less state legislation on NEM/AV subjects than current interest would suggest. Some states have none at all. Some make only meager reference to simpler types of media. Some have either such a considerable amount of legislation or laws of such sweeping significance that the groundwork is laid for extensive programs of NEM/AV. Yet external evidence has clearly shown that other states having little or no legislation nevertheless provide extensive programs for NEM/AV.
- * In some states legal authority relates to one or more of the several types of media included in the definition of "audiovisual". In other states, there is little or no specific legislation, yet evidence showed that similar NEM/AV activities were being conducted by school authorities.
- * It might be inferred that the greater the amount of legislation (either basic or current), the greater the number of provisions relating to the use of new media. However, there appears to be no consistent or measurable relationship between the amount of legislation on public schools and the number of specific references in that legislation to audiovisual media of instruction.
- * Lack of legislative citations should call to the attention of NEM/AV leaders and legislators the need for legislation. But it must also be remembered that lack of citation does not necessarily connote lack of authority to act. If authority is sometimes not clearly expressed, it is frequently possible to act on the basis of implied authority through use of a combination of legal provisions showing the clear intent of the law.
- * In 1960-61, no court decisions were found dealing directly or by implication with a significant aspect of the school use of audiovisual media.



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Chapter 6

SUMMARY AND CONCLUSIONS

Professional interest in the orderly development and improvement of audiovisual education practices and services of state departments of education has increased markedly in recent years, made possible in part by the enlarged expenditures of Federal and state funds in support of such programs. This increased interest prompted publication of this <u>Summary Report</u> of an earlier States Audiovisual Education Study (<u>SAVES</u>). The original <u>SAVES</u> Study

The SAVES Study was conducted by the School of Education of the University of Southern California, Los Angeles, between March 1961 and January 1963, pursuant to Contract SAE-9415 under Title VII B of the National Defense Education Act of 1958, administered by the U.S. Office of Education. The publication in which findings were presented is titled Practices of State Departments of Education in New Educational Media/Audiovisual Education During 1960-61. Vol. I, Final Report, Vol. II, Appendices.

first published in 1963, contained detailed information regarding new educational media programs then operating in each of the 50 states. In each case, observations were based on 1960-61 data obtained through questionnaires, personal interviews, and analysis of applicable publications, statistical reports, and legal statutes.

Although the complete <u>SAVES</u> Study will continue to serve as a reference point in the development of such state programs, its usability is to a considerable extent restricted by the comprehensiveness of its coverage and the limited availability of copies. For these and other reasons, then, a summary report of its principal findings would appear to be useful and needed.

This Summary Report:

- * Describes the research design and procedures employed in the original <u>SAVES Study</u> (Chapter 1);
- * Examines and discusses certain 1960-61 national patterns of new educational media activities in the 50 state departments of education, with special attention to: (a) organization and finance, (b) leadership activities, (c) operational services and activities, (d) research and development activities, and (e) regulatory activities (Chapter 2);
- * Reports 1960-61 opinions and observations of state department of education personnel in the 50 states concerning growth, needs, problems, and anticipated future developments in the educational media field (Chapter 3);
- * Compares the 1960-61 and 1964-65 plans of organization and activities for new educational media in five selected states (California, Connecticut, Hawaii, New York, and Pennsylvania) (Chapter 4);



- * Compares selected aspects of the 1960-61 and 1964-65 new educational media programs in the 50 states on the basis of responses to a questionnaire circulated to and completed by members of the Association of Chief State School Audiovisual Officers (ACSSAVO) and containing items identical with those of the earlier SAVES Study questionnaire (Chapter 4);
- * Summarizes and comments on legislation (as of 1960-61) affecting and pertaining to new educational media activities in the 50 states (Chapter 5).

Organization and Finance

In examining various aspects of the organization and financing of NEM/AV activities in state departments of education, the original SAVES Study sought to determine: (1) the number of persons who assumed NEM/AV activities within the SDE, (2) which of these positions were NEM/AV designated, which carried "general staff" designations, and which were technical and professional, (3) the unit or organizational arrangement within the SDE which provided NEM/AV services, and (4) budget allocations supporting NEM/AV activities.

- l. In general, the evidence points to increasing recognition of NEM/AV activities in state departments of education. Only 60% of reporting states indicated presence of such units in 1960-61; 78% of them reported such units in 1964-65. The 1960-61 survey findings supported the observation that, in a large number of instances, it was sometimes difficult to identify the NEM/AV unit as an administrative entity in the state department of education table of organization, and no national pattern of organization was discernible. Current changes, in these respects, are especially evident. The five-state analysis of SDE NEM/AV units (Chapter 4), for example, suggests current increases in the size of NEM/AV professional staffs and improved recognition of NEM/AV unit responsibilities and its place in the plan of state department organization.
- 2. Whereas in many instances in 1960-61 it was found that NEM/AV activities were carried on within a "Division of Instruction", recent data (1964-65) indicate increased use of specialized SDE NEM/AV personnel and designated SDE NEM/AV units to carry out such assignments and responsibilities. The 1960-61 ratio of general staff members having some SDE NEM/AV responsibilities to those specifically designated as NEM/AV professionals was approximately 10-1 (978 to 96).
- 3. The National Defense Education Act of 1958 (with subsequent amendments) has enabled state departments of education to expand NEM/AV staffs, facilities, and services. With the current influx of new Federal funds in support of SDE NEM/AV programs, there is the concomitant need to expand SDE staffs and facilities to administer funds for those programs.
- 4. It was found, in 1960-61, that NEM/AV activities were sometimes divided between more than one SDE office, and, occa-



sionally, between two or more persons in the same office. Where such divisions occurred, educational television appeared to be the activity most frequently separated from other NEM/AV activities. Only infrequently were library and audiovisual activities combined in the same office, and this arrangement appeared not to be common.

- 5. Most of the individuals identified in the 1960-61 survey as doing less than full-time SDE NEM/AV work (the majority of instances) had not had special professional NEM/AV preparation for their assignments. The same situation prevailed for the relatively few individuals whose NEM/AV assignments occupied their full-time.
- 6. In 1960-61, there were only 96 professional <u>full-time</u> <u>equivalent NEM/AV</u> staff positions in state departments of education for the United States as a whole. Of these, 20 were employed full-time in educational television work. The 1964-65 questionnaire returns show (of 46 reporting states) only 98 such full-time equivalent positions. But in the five-state survey group, marked recent increases in such professional personnel were noted.
- In 1960-61, a total of 18 states reported identifiable SDE NEM/AV budgets (ranging from \$9,000 to \$1,000,000). total amount budgeted in these states was approximately \$2.3 million. Another 15 states reported estimated (but not separe ately identified) SDE NEM/AV budgets ranging from \$2,000 to \$481,824. The total amount budgeted in these states was approximately \$800,000. The remaining states appeared to be unable to furnish even an estimate of SDE funds expended for state level NEM/AV activities and services. The 1964-65 data derived from analysis of NEM/AV activities of five selected states indicate sizable increases in identifiable NEM/AV budgets (ranging from 25% to 100%). Large portions of all these NEM/AV budgets are being spent on educational TV (averaging approximately one-third of all available funds). Special support funds for educational television have also been appropriated in four of the five states. Budgeted funds for television are used in a number of ways: for matching, (b) for purchase of classroom receivers and experimental equipment, (c) for purchases of video tapes, (d) for program production and station operation, and (e) to support special ETV projects.
- 8. Job specifications and special qualification requirements for SDE NEM/AV professional positions were noted in the 1960-61 survey. In 32 of the 50 states, the most common minimum educational requirement was the master's degree; teaching experience was frequently specified; school supervision experience was required in 11 states and school administration experience in 13. Results of the ACSSAVO questionnaire and of the five-state analysis of recent developments suggest that there is increasing specification of suitable training and experience for professional SDE NEM/AV assignments.



<u>Leadership Activities</u>

Leadership functions identified for SDE in this study were:

(a) planning and advising on curriculum development programs,

(b) providing in-service training for personnel at state and
local levels, (c) preparing publications to implement educational
goals, (d) providing leadership in the innovation and evaluation
of new methods and materials, and (e) conducting research designed
to improve an educational activity.

- In instances where NEM/AV personnel were designated as serving within SDE's in 1960-61, their most frequently reported activities were: (a) providing consultation, (b) assisting in curriculum revision, (c) preparing guides and other utilization aids, and (d) planning and conducting conferences and workshops. Of these, the last was the one engaged in most frequently by NEM/AV professional staff members. Workshops conducted involved large numbers of people. Although they were intended primarily for and attended by large numbers of teachers, they also attracted many administrators, supervisors, and lay persons (such as board members) interested in education. There was a much smaller number of meetings held exclusively for NEM/AV staff members of the states' school systems. The 1964-65 data suggest that conferences and workshops continue to occupy much of the time of SDE NEM/AV personnel. Many of the more recent meetings tend to be concerned more with innovations -- the introduction, promotion, or evaluation of educational television, multi-media utilization, programmed instruction, and the like.
- 2. In 1960-61, the most commonly reported SDE NEM/AV publications were catalogs and listings of NEM/AV materials. Of 180 SDE items (total) reported as dealing "in whole or in part" with NEM/AV matters, 30 were described as catalogs or listings, while 98 (more than half) dealt exclusively and 52 dealt partially with NEM/AV matters. The reported ratio of SDE NEM/AV publications to total SDE publications was 180 to 2,121 (or approximately 1 to 11). The 1964-65 data show an increase in the number of publications dealing exclusively with NEM/AV. The five-state survey clearly shows that publications continue to be an important SDE contribution to NEM/AV developments and that catalogs remain prominent in the list. Reports of conferences, experiments, evaluation of services, and suggestions for media utilization are becoming more numerous.

Operational Services and Activities

Operational services and activities of state departments of education were identified in the <u>SAVES Study</u> as being of two types: (1) the procurement and distribution of new educational media (materials), and (2) the actual production of certain types of materials.

1. By far the most commonly reported SDE NEM/AV service, in 1960-61, was the provision of new educational media and related equipment for use by SDE staff members. The most common loan items were 16mm films and transparencies. While this service



continued to be important in 1964-65, other services were occupying more attention of the SDE NEM/AV unit.

- 2. In 1960-61, 11 of 50 states provided a state-level distribution loan service supplying new educational media to schools throughout their respective states. The 1964-65 survey data showed a sharp increase in such services. Video tapes appear to be assuming new importance as loan items for SDE NEM/AV distribution units. Duplication of recorded magnetic tapes is an important service provided by some states.
- In 1960-61, a total of 21 of the 50 states reported SDE production of relatively small quantities of various types of new educational media for public school use. Slides were the must frequently mentioned items produced, followed closely by 16mm sound films, tapes, large transparencies, radio broadcasts, and television programs (including video tapes). SDE NEM/AV personnel were also reported as providing considerable professional guidance and assistance for production to other SDE offices, to other state agencies, and to various school units. Only infrequently did the SDE NEM/AV unit provide individualized, custom production services for schools. Results of the ACSSAVO questionnaire study showed that the number of states involved in production activities declined between 1960-61 and 1964-65. However, the 1964-65 five-state survey results suggest that in their cases SDE involvement with NEM/AV production activities is increasing markedly, especially with regard to educational television and audio tape recordings. Three of the five states concerned also reported increased production of 16mm films and simple graphic materials.
- The 13-state personal interview (from which the five states reported were chosen) survey of 1964-65 highlighted the range of the centralized-decentralized continuum of SDE NEM/AV activities (from a highly decentralized state, at the one extreme, offering almost no operational services, to a highly centralized state offering numerous statewide services, at the other). Interview data suggest that many states are now actively promoting the expansion of numbers and services of decentralized NEM/AV centers, rather than continuing to expand state-level centralization. California is highly decentralized -- and has been from the beginning. Hawaii is developing local distribution centers in outlying island locations. Pennsylvania is cooperating with regional educational service centers to provide NEM/AV services to local schools, while at the same time retaining fairly direct control of the NEM/AV activities of these centers. Connecticut has developed local NEM/AV centers in each of its cities of more than 20,000 population. New York works with and through local councils and school groups, but provides considerable central direction.

Research and Development Activities

Included in the original <u>SAVES Study</u> questionnaire and follow-up interview schedules were items pertaining to <u>NEM/AV</u> research and development activities. Specifically, these items referred to:



- (1) the collection of statistics concerning the use of new educational media in the public schools—usually involving "annual reports from school districts, general surveys, and special studies", and (2) types of services available to the SDE in conducting and documenting official studies related to new educational media.
- I. The 1960-61 survey results suggest only minimal NEM/AV research and development activity by SDE personnel. The little that was being done at that time appeared mainly to involve the collection of statistics relating to NEM/AV inventories and frequency of use of materials and equipment. The five-state survey shows, however, that in some states there is new interest in evaluative and research activities by SDE NEM/AV professional personnel, especially in connection with experimental ETV programs and various other educational innovations. Many of these are made possible largely through the availability of Federal funds.
- 2. Although a few states may be seen to have given increased attention to NEM/AV research activities in SDE's throughout the country, the level and quality of this activity appear to be at quite a low level in the nation as a whole. It seems logical to assume that SDE's must develop a new concern for this role in the near future. A part of this need stems from increased participation of local school districts in research and evaluation activities—especially those required by the evaluation of innovational practices encouraged through Federal funds and programs.

Regulatory Activities

The 1960-61 SAVES Study considered NEM/AV implications of the SDE regulatory activities relating to: (a) accreditation of schools, (b) certification of school personnel, (c) building and facilities standards, (d) NEM/AV equipment standards, and (e) SDE distribution of state aid funds for NEM/AV activities.

- 1. Of 44 states in 1960-61 reporting SDE-developed and published accreditation standards, 32 included items pertaining to NEM/AV matters. Most such references were general, rather than specific, and recommended rather than mandatory.
- 2. Accreditation standards for NEM/AV personnel employed in schools were almost non-existent in 1960-61. Only two states (Oklahoma and Illinois) reported them.
- 3. Only 13 of 50 states in 1960-61 reported required NEM/AV course work for certification of professional school personnel. Of these, five required it for librarians, six for teachers, and ten for supervisors and administrators. (Requirements applied to more than one type of certificate in some states.) The 1964-65 questionnaire survey results indicate a considerable increase in such requirements for all three groups—from 14% to 24% of the reporting states for general teacher certification, from 14% to 30% for librarians, and from 6% to 22% for administrators and supervisors.

- 4. In 1960-61, the states typically did not designate their own (as opposed to Federal or local) funds to support NEM/AV activities. While at the same time 27 states distributed funds earmarked for NEM/AV purposes. Only five states reported that such funds were a regular part of the state's school support program, and 19 of them reported that funds so earmarked were related exclusively to NDEA programs. In 43 of the 50 states, on the other hand, non-earmarked funds could be used for NEM/AV purposes, with local board approval. The 1964-65 survey results indicate some decrease in the number of states providing both earmarked and non-earmarked SDE funds for NEM/AV activities, although the questionnaire item for this information did not require claboration as to the size of such allocations.
- 5. In 1960-61, nearly half the states were without published standards for building requirements relating to NEM/AV needs—such as light control, storage facilities, power outlets, acoustical control, ventilation, and provisions for multi-media use. Where they did exist, the standards referred primarily to conventional building code requirements rather than to anything especially related to NEM/AV applications. Characteristically, also, such standards as did exist were recommended rather than required. The 1964-65 survey results suggest that the number of states having standards for buildings and equipment is decreasing.

State Laws Pertaining to NEM/AV Matters

Concurrently with the original <u>SAVES Project</u>, a study was undertaken (reported in Chapter 5) to determine the character of various state laws pertaining to audiovisual media and to the establishment and operation of educational television stations. Its principal purpose was to find the legal authority that affected or might affect "increased or improved use of audiovisual media". The study sought not only instances of legal authority specific to uses of audiovisual media in schools but references of more general or related types that might be invoked, in the absence of more specific authority as needed.

- l. There is considerably less legislation on NEM/AV subjects than current interest would suggest as necessary or desirable. Some states have none; some make only minor amount of reference to it; some have a great deal. The evidence points to the fact that there is little connection between the amount of legislative reference to NEM/AV matters and the size or quality of such programs.
- 2. In some states legal authority is stated for one or more of several types of new educational media usually included in the definition of "audiovisual". In other states there is little or no legislation with such specific applications. Yet similar NEM/AV activities were conducted in both situations.
- 3. There appeared to be no consistent or measurable correspondence between the sheer amount of legislation for public schools generally and the number of specific references in that legislation to NEM/AV matters.



4. Lack of legislative reference to NEM/AV matters does not signify school personnel are without authority to act. Experience has shown that it is frequently possible to imply authority to act through a combination of expressed legal provisions which show the clear intent of the law.

Television Developments

The unusual expansion of state department of education activities related to educational television prompted special attention, in this <u>Summary Report</u>, to applicable legal provisions for its administration and support.

- 1. In 1962, 31 states reported educational television stations within their borders; in 1965, 34 states and Puerto Rico reported them. Increases in stations appeared to be occurring in states that had one or more stations in 1962, rather than to be spreading to states that were without them at that time.
- 2. Of 31 states reporting ETV stations in 1962, 13 reported these stations were owned by more than one agency. Of 34 states reporting such stations in 1965, 21 indicated multiple ownership.
- 3. Leadership in the introduction, development, support, and improvement of educational television is frequently exercised by state departments of education. In 1962, a total of 70 kW stations were on the air (five of these on unreserved channels); in 1965, there were 109 (13 on unreserved channels). These stations were owned by twelve different types of agencies or organizations, as follows:

	1962	1965
Owned by state boards of education, state departments of education, state boards of higher education, or special state agencies	1 1	15
Owned by local boards of education or school districts (1 public library)		
Owned by universities and colleges	21.52	39 52
Owned by foundations, associations, or corporations (and non-official commissions)		40

²Fraction arises from the fact of joint ownership with another class of agency or organization.

^{4.} There has been an increase (in 1964-65 as compared to 1960-61) in the number of SDE's having legal authority on which to base decisions to establish or operate educational television stations or to fulfill other responsibilities concerned with them. A similar increase was noted for the number of non-SDE agencies having similar authority.

Several recommendations appear to be justified by the preceding statements of findings, as follows:

- 1. State departments of education should move quickly to establish NEM/AV standards—as local guidelines for development of programs. Such standards should be developed in cooperation with national agencies, such as DAVI, which are currently involved in similar efforts. Such standards should apply to the accreditation of schools, professional certification of teachers, media specialists or generalists, and librarians, as well as administrators and supervisors. They should also apply to matters pertaining to building facilities, instructional materials center (library and audiovisual) units, and equipment and materials. Special care should be taken in developing such standards, to insure their use as "floors", rather than the usual or "average" level of achievement.
- 2. Since state departments of education are in all cases constitutional offices, lack of specific legal references to NEM/AV activities and standards in constitutional or other official administrative codes may be regarded as a serious handicap to proper program development. Such references have the advantage of providing stability to the course of such development and of making it possible to avoid frequent changes of policy or diminution of financial support.
- Special attention should be given to the professional NEM/AV personnel needs of state departments of education. practice at this level has been to employ one or more generalists capable of providing ass_stance and counsel in nearly all phases of the program. The recent dramatic expansion of public school involvement with instructional technology highlights a new need for NEM/AV specialists capable of providing expert leadership to greater depth in more limited areas of concern. Perhaps the ACSSAVO group itself, working in cooperation with the PMMS (Professional Education of Media Specialists) Commission of the Department of Audio isual Instruction will be helpful in developing professional preparation criteria for both types of individuals. Attention should also be given to publicizing effective ways of finding and utilizing suitable specialist personnel within states through development of professional rosters, specialist training sessions, and the like.
- 4. The influence of the several applicable Federal programs (especially NDEA) for enrichment of SDE NEM/AV activities should be studied and evaluated with care. The stimulation of such programs will no doubt continue to be reflected in expanded NEM/AV professional and non-professional staffs in state departments of education. The intricacies of relationships among state department NEM/AV offices, regional cooperative demonstration centers, county-district facilities, regional research and development centers, and single school units r be studied and examined to provide needed articulation and ef iency. Perhaps the dangers of making inadequate or ill-advised use of Federal resources have never been greater.
 - 5. There is urgent need for long-range cooperative planning



for state department of education NEM/AV activities and programs. ACSSAVO appears to be moving ahead vigorously in fulfilling some of this need. But still other cooperative projects (some involving the National Defense Education Act and the Elementary and Secondary Education Act of 1965 programs, with their institutes for media specialists and school librarians and other programs; some involving various committees and commissions of the Department of Audiovisual Instruction and the American Association of School Libraries; and others) are needed. In this connection, some of the present experimental approaches to statewide development (Oregon's "Project Springboard", and others) also should be assessed for guidance.

It appears almost certain that the way ahead for state department NEM/AV activities may be epitomized as "more and more". Promising innovations surround us on all sides: Mobile laboratories, educational kits especially tailored to local or regional requirements, educational television networks, telephone lecture systems, tailormade in-service units, video-tape recording facilities, demonstration teams and centers, expanded purchases of materials and equipment, curriculum laboratories, multi-media demonstration units, ITV and ETV resources, and many others. State-level leadership planning to guide these developments will be more essential than ever before. The challenge is significant; the degree to which it is met will surely reflect the professional maturity of the field. Thus continuous re-studying of state department of education involvement with these matters is needed.



SELECTED BIBLIOGRAPHY

The books, monographs, and pamphlets listed here may serve as a reference guide for those who have need for literature on various aspects of NEM/AV activities and services. It also contains selected references to publications that may be useful for those concerned with new approaches to school organization and curriculum changes which have implications for developments in the NEM/AV field.

- Allen, William H. Television for California Schools. Sacramento, California: State Department of Education, 1960.
- Audiovisual Education, A Manual for Administrators. Raleigh, North Carolina: Department of Public Instruction, 1962.
- Brickell, Henry M. Organizing New York State for Educational Change: A Study of the Dynamics of Instructional Change in the Elementary and Secondary Schools of New York State with Recommendations for Improved Organization. Albany, New York: State Education Department, 1961.
- Brown, James W. and Ruth Aubrey, Eds. New Media and Changing Educational Patterns. Sacramento, California: State Department of Education, Bureau of Audio-Visual and School Library Education, 1966.
- Brown, James W. and Kenneth D. Norberg. Administering Educational Media. New York: McGraw-Hill Book Company, 1965.
- Brown, James W. and James W. Thornton, Jr. New Media in Higher Education. Washington, D. C.: National Education Association, 1963.
- Clark, H. F. Cost and Quality in Public Education. Syracuse, New York: Syracuse University Press, 1963.
- Cogswell, John F., Robert L. Egbert, Donald G. Marsh, and Frank A. Yett (principal investigator, David G. Ryans). New Solutions to Implementing Instructional Media Through Analysis and Simulation of School Organization. Santa Monica, California: System Development Corporation, 1964.
- Corey, Stephen M. Helping Other People Change. Columbus, Ohio: Ohio State University Press, 1963.
- DeGrazia, Alfred and David A. Sohn, Eds. Revolution in Teaching;
 New Theory, Technology, and Curricula. New York: Bantam
 Books, 1964.
- Developing the Use of New Educational Media. Washington, D. C.: Council of Chief State School Officers, 1964.
- Diamond, Robert M., Ed. A Guide to Instructional TV. New York: McGraw-Hill Book Company, 1964.
- Edling, Jack V., Ed. The New Media in Education. Sacramento, California: Sacramento State College, 1960.

- Educational AM and FM Radio and Educational Television Stations
 by State and City. Prepared by Gertrude G. Broderick.
 Washington, D. C.: U. S. Department of Health, Education,
 and Welfare, Office of Education, 1965.
- D. C.: Educational Policies Commission, National Education
 Association, 1964.
- Educational Television: The Next Ten Years. Stanford, California: The Institute for Communication Research, Stanford University, 1962.
- Erickson, Carlton W. Administering Audio-Visual Services. New York: The Macmillan Company, 1959.
- Erickson, Carlton W. Fundamentals of Teaching with Audiovisual Technology. New York: The Macmillan Company, 1965.
- Finn, James D., Donald G. Perrin, and Lee E. Campion. Studies in the Growth of Instructional Technology, I: Audiovisual Instrumentation for Instruction in the Public Schools, 1930-1960. Occasional Paper No. 6, NEA Technology Development Project. Washington, D. C.: Department of Audiovisual Instruction, National Education Association, 1963.
- Use of Television. Sacramento, California: California Council on Teacher Education, 1963.
- Harcleroad, Fred F., Ed. Audio-Visual Administration. Dubuque Iowa: Wm. C. Brown and Company, 1951.
- Hubbard, Richard D., Ed. Educational Communications Convocation Proceedings. Albany, New York: University of the State of New York, the State Education Department, Division of Educational Communications, 1964.
- Hubbard, Richard D., Ed. Greece Central School District #1 Educational Communications Evaluation Report. Albany, New York: University of the State of New York, the State Education Department, Division of Educational Communications, August, 1964.
- Instructional Materials Center in Action, The. Bulletin No. 429.
 Lansing, Michigan: Department of Public Instruction, 1960.
- Klapper, Joseph f. The Effects of Mass Communication. New York: Free Press of Glencoe; A Division of the Macmillan Company, 1960.
- Kopps, Wayne F., Allen C. Greene, and M. C. Gassman. <u>Design</u>
 <u>Criteria for Learning Spaces: Seating, Lighting, Accustics</u>.
 Albany, New York: The University of the State of New York, Office of Facilities, 1964.
- Lewis, Philip. Educational Television Guidebook. New York: McGraw-Hill Book Company, 1961.
- Mahar, Mary Helen. <u>Certification of School Librarians</u>. Washington, D. C.: U. S. Department of Health, Education, and Welfare, Office of Education, 1958.

- Mahar, Mary Helen, Ed. The School Library as a Materials Center. Washington, D. C.: U. S. Department of Health, Education, and Welfare, Office of Education, 1964.
- Mahar, Mary Helen. State Department of Education Responsibilities for School Libraries. Washington, D. C.: U. S. Department of Health, Education, and Welfare, Office of Education, 1960.
- Media Leadership, Media Manpower, Teacher Re-Education: Summary Report, 11th Annual Lake Okoboji Educational Media Leadership Conference. Iowa City, Iowa: The University of Iowa, 1965.
- National Education Association. Schools for the Sixties. New York: McGraw-Hill Book Company 1963.
- Newer Educational Media. Papers of the Regional Research Conference. University Park, Pennsylvania: The Pennsylvania State University, 1961.
- Noel, Francis W. and Elizabeth S. Noel, Eds. <u>Audiovisual</u> <u>Leadership</u>. A Summary of the Lake Okoboji Audiovisual Leadership Conferences 1960-1964. Iowa City, Iowa: The University of Iowa, 1965.
- Noel, Francis W., Paul V. Robinson, and Elizabeth S. Noel.

 Practices of State Departments of Education in New Media/
 Audio-Visual Education During 1960-61. Los Angeles, California:
 University of Southern California, 1963.
- Ofiesh, Gabriel D. and Wesley C. Meierhenry, Eds. Trenús in Programmed Instruction. Washington, D. C.: Department of Audiovisual Instruction, National Education Association, 1964.
- Research, Principles, and Practices in Visual Communications.

 Washington, D. C.: Department of Audiovisual Instruction,
 National Education Association, 1960.
- Rich, William B. Approval and Accreditation of Public Schools. Washington, D. C.: U. S. Department of Health, Education, and Welfare, Office of Education, 1960.
- School Instructional Materials Center and the Curriculum: The Library Audiovisual Center. Harrisburg, Pennsylvania: Department of Public Instruction, 1962.
- Schuller, Charles F., Ed. The School Administrator and His Audio-Visual Program. Washington, D. C.: Yearbook of the Department of Audio-Visual Instruction, National Education Association, 1954.
- Schuller, Charles F., Harry J. Skelly, and Donald Scott. Survey of Audio-Visual Education in Hawaii. Ann Arbor, Michigan: University Microfilm Service, 1960.
- Space for Audio-Visual Large Group Instruction. New York: Educational Facilities Laboratories, Inc., 1963.



- Staffing the Instructional Materials Center in Elementary and Secondary Schools. Lansing, Michigan: Department of Public Instruction, 1960.
- Storlin, Glenn. <u>Television and Higher Education</u>. A Plan for Statewide Development in New York. Albany, New York: The University of the State of New York, The State Education Department, 1962.
- Taba, Hilda. <u>Curriculum Development: Theory and Practice</u>. New York: Harcourt, Brace & World, Inc., 1962.
- Teaching by Television. New York: Ford Foundation and the Fund for the Advancement of Education, 1961.
- Trow, William Clark. <u>Teacher and Technology: New Designs for Learning</u>. New York: Appleton-Century-Crofts, 1963.
- Trump, J. Lloyd and Dorsey Baynham. Focus on Change: Guide to Better Schools. Chicago: Rand McNally and Company, 1961.
- Trump, J. Lloyd. <u>Images of the Future</u>. Washington, D. C.:
 National Association of Secondary School Principals, 1959.